

MICHIGAN SCHOOL FINANCE AT THE CROSSROADS:

A QUARTER CENTURY OF STATE CONTROL

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Executive Summary

Michigan's current school-funding system was established a quarter century ago with the passage of a major reform commonly known as Proposal A. The new system accomplished what it set out to do—it lowered property taxes and narrowed, but did not eliminate, revenue inequalities across districts. Proposal A also sharply restricted the ability of Michigan citizens to determine the level of funding for their local public schools.

Although the state controls most operating revenue available to Michigan's public schools, it has never calibrated funding levels to the resources needed for students to meet outcome standards, even as the federal No Child Left Behind act and the Michigan Merit Curriculum dramatically increased achievement expectations.

Michigan's public school system is at a crossroads. It is not performing well. In contrast to 1993, Michigan's tax rates and student performance now fall well below the national average. These unsatisfactory educational outcomes now constitute the primary catalyst for changes in funding policy.

With this report, we hope to inform a necessary public discussion of Michigan school funding and how it can be improved. We explain the principles of equity and adequacy in school finance. We provide an accessible primer on how Michigan's K-12 public schools are currently funded. We then turn to analyze in greater detail how the Proposal A system has performed. We identify several key problems, and conclude by offering policy recommendations to address them. After a quarter century, there are evident strains in Michigan's school finance system that should be addressed at the state level.

Over the last 15 years the adequacy of Michigan's school funding has seriously eroded.

- After adjusting for inflation, total K-12 education funding declined by 30 percent between 2002 and 2015. Seventy-four percent of this decline was due to declining state support for schools. Per-pupil revenue declined by 22 percent during this same period.
- Foundation allowance revenue is a vital component of total revenue, providing most discretionary funding for public schools. Per-pupil foundation allowances are set by the state and vary across local districts and charter schools. Michigan's high-revenue districts have experienced a nearly uninterrupted drop in their foundation grants' inflation-adjusted value over the entire Proposal A period, declining by nearly 40 percent. Most districts' real foundation allowances increased in the early years under Proposal A. Since 2003, however, Michigan's basic foundation allowance has fallen by 18.5 percent, while the minimum foundation declined by 25.6 percent.
- Proposal A devoted little attention to addressing the added costs of educating students with added needs. While the number of at-risk students has increased significantly, inflation-adjusted at-risk funding per at-risk student has plunged by over 60 percent since 2001.
- Michigan ranks dead last among states in total education revenue growth since the passage of Proposal A. After adjusting for inflation, Michigan's education revenue in 2015 was only 82 percent of the state's 1995 revenue. No other state is close to a

decline of this magnitude. In 48 states, 2015 education revenue was higher, often much higher, than in 1995. Michigan's real per-pupil revenues declined by 15 percent over this same period, ranking 48th among the 50 states.

Why has education funding declined? The state's allocation of School Aid Fund revenues to activities other than K-12 education has contributed to the problem, but the fundamental cause is the state's declining tax effort.

- In the early years following Proposal A's passage, the Legislature transferred over \$600 million annually from the state's General Fund to the School Aid Fund. In recent years, however, transfers have gone in the other direction, as the Legislature has devoted over \$600 million of SAF revenue to activities formerly funded by the General Fund. This represents a net decline of over \$1.2 billion annually in state revenues devoted to K-12 education between 1995 and 2015 (more than \$850 per pupil), or a decline of \$1.6 billion when adjusted for inflation.
- This transfer of revenues between state funds is a symptom of a historic drop in Michigan's tax effort, that is, the share of the economy devoted to state and local taxes. Before 2002, Michigan's tax effort surpassed the national average. Since then, it has fallen substantially below the (simultaneously declining) tax effort of states nationally. If Michigan devoted the same fraction of its economy to state and local taxes as the national average, it would generate an additional \$3 billion in revenues per year, an amount nearly sufficient to lift school funding to the level that prevailed in 1994.

Among states, Michigan's funding of special education services is unusually stingy, and this hurts both special education and regular education students.

- Federal law grants students with disabilities the right to a free and appropriate education, but allows states to decide how to pay for those services. Michigan has placed most of the funding responsibility on the local and county levels. Proposal A, however, precludes local districts from levying taxes to cover additional special education costs, and intermediate school districts have very unequal ability to raise revenues for special education services.
- Under Michigan's funding arrangements, students with disabilities almost always represent a financial loss to districts and charter schools, and the more serious a student's disabilities, the larger the financial loss.
- Because revenues from other levels of government fall short of required special education costs, Michigan districts on average devote over \$500 per student of regular education funds to pay for special education services. In some districts this diversion of funds exceeds \$1,200 per pupil. Consequently, the state's inequitable and inadequate special education funding impacts both special education and regular education students.

Michigan's approach to school facility finance guarantees unequal opportunities for students and unequal burdens for taxpayers.

- The sweeping Proposal A changes did not include any elements directed to financing school facilities. School construction and infrastructure improvements remain a local responsibility, funded entirely by local property taxes. Consequently, inequalities in

local districts' property wealth create dramatic disparities in facility quality across Michigan districts.

- The quality of school facilities matters greatly for the type of learning experiences that students have access to. They also matter for community development and engagement. These opportunities are very unequally distributed across Michigan communities.
- Property tax millage rates in some poor districts would have to be 10 times the level in affluent districts to generate the same per-pupil revenue. Many low-property-wealth districts are in rural areas.
- Michigan is one of 13 states that provide no state aid for facilities. The state's only role has been to lower local district borrowing costs under certain circumstances through the state School Bond Loan Fund. In recent years lawmakers have curtailed even this meager state support.
- Charter schools cannot levy property taxes to pay for facilities, so most schools rent their buildings with foundation allowance revenue. This represents a significant financial disadvantage for charter schools.

Michigan's school choice policies have increased the schooling options for many students, but features of the state's financial arrangements for choice promote inefficiency.

- Ten percent of Michigan students are enrolled in charter schools, and another 14.3 percent participate in interdistrict choice. Charter schools serve a small share of students in most districts, but at least 25 percent of resident students attend charter schools in 18 Michigan districts. Interdistrict choice produces net enrollment gains of at least 25 percent in 58 districts, and net enrollment losses of at least 25 percent in 81 districts.
- Charter schools require adjustments to any state financing scheme built around a system of local school districts, because they do not have taxing authority. States vary considerably in funding arrangements for charter schools. Since all operational funding in Michigan is tied to student enrollment, school choice policies have relatively strong financial impacts.
- Matching revenues to costs is a fundamental objective of any school finance system, but it is especially important in settings with high rates of school choice participation to avoid creating perverse incentives for schools to attract low-cost students (regular versus special education) or focus on low-cost services (online instruction versus high school science labs).
- By establishing an independent system of schools alongside the traditional system, charter schools may increase per-pupil overhead costs due to the duplication of administrative and instructional support services, or failure to coordinate operations (for example, transportation) across the two sectors.
- Schools that receive public funds should be accountable to the public. Michigan's charter schools submit the same financial reports to the state as local districts. However, when a charter school is managed by a private company, some financial information may not be readily available. Changes in financial reporting guidelines could improve the transparency of charter schools' management fees, rental payments, and employee compensation.

The Michigan School Finance Research Collaborative’s 2018 school finance adequacy study represents a landmark opportunity to fix long-standing problems.

- Formed in 2016, the MSFRC is a bipartisan statewide group of business leaders and education experts. In response to a nationwide request for proposals, the Collaborative selected a joint proposal from two nationally prominent organizations to perform the research. The combined experience and expertise of these two organizations is unsurpassed in the field of adequacy research.
- The MSFRC study is ambitious, well designed, and well executed. It estimates the cost of educating both typical students and students with special needs to meet the state’s outcome standards as efficiently as possible. It relied on two complementary estimation strategies to enhance the robustness of its findings. It was the first statewide adequacy study to include charter schools. The study provides the best available empirical basis for designing an efficient, equitable, and adequate system of education finance in Michigan.
- The study’s adequate schools are well staffed and equipped. The cost estimates are based on schools with rich learning opportunities and support for typical and struggling students. Most Michigan parents would welcome sending their children to schools with the resources the study identifies as necessary for all children to have realistic opportunities to meet state academic standards.
- The study’s cost estimates are based on employee compensation at current levels. Its methods define adequacy in terms of necessary staffing and nonpersonnel resources, for example, class sizes, number of counselors, and textbook and computers resources, while keeping employee salaries and benefits at prevailing levels.
- The MSFRC study estimates the base per-pupil cost to educate regular education K-12 students at \$9,590. This does not include transportation or capital facility costs, and only includes pension costs at 4.6 percent of wages. It estimates the additional costs for special education, English language learners, and students living in poverty, and the cost of high-quality preschool. The study recommends equivalent base and adjustment funding for charter schools and traditional districts, as well as funding outside the base funding for transportation and for retirement expenditures above 4.6 percent of wages.
- We review the study’s findings and recommendations in [section 8](#). While we find most of its recommendations to be compelling, we differ on some, including those to adjust funding for school district enrollment size and regional cost of living. We also differ somewhat with its transportation and career and technical education recommendations.
- We estimate that about \$3.6 billion in additional revenue, above Michigan’s current funding, would be required to implement the adequacy study’s core recommendations. While this represent a substantial increase, real revenue for Michigan’s schools was comparable in 2007. Similarly, if Michigan’s tax effort today matched that of 2007, this would generate more than \$1.7 billion above the revenue needed to implement the adequacy study’s recommendations.

Policy Recommendations

Our recommendations are aimed at establishing a financial foundation for attaining the high-level educational outcomes that Michigan children deserve. The state has established

high performance standards for students and schools. It has the responsibility to ensure that they have adequate resources to meet those standards.

Some of our recommendations follow those of the MSFRC study. Others differ with the MSFRC recommendations or pertain to problems not addressed in that study. We recommend:

- High-quality preschool for all four-year-olds and at-risk three-year-olds funded at \$14,155 per student.
- Base funding for all K-12 students in district and brick-and-mortar charter schools of \$9,590. This does not include transportation or capital facility costs, and only includes employee retirement costs at 4.6 percent of wages and salaries.
- Additional funding above base funding for students with special needs. Following the MSFRC study, we recommend an additional funding weight of 0.35 for students living in poverty, and weights (at levels 0.35, 0.50, 0.70) for English language learners, depending on their level of English proficiency.
- Additional funding weights for special education students, calibrated to the severity of their disabilities, of 0.63 for mild disabilities, 1.04 for moderate disabilities, and 90 percent state reimbursement of costs for severe disabilities. Each of these weights is set at 90 percent of the MSFRC study's cost estimates in order to create a financial disincentive for over-identification of students with disabilities.
- Pupil counts for the purposes of district and charter school base funding based on either (a) a 50-50 weighting of spring previous-year and fall current-year enrollment, or (b) a three-year moving average of past- and current-year fall enrollment, whichever is greater. Students should not be harmed when other children leave their schools. The precipitous revenue declines that now accompany falling enrollments are damaging the quality of education in many school districts. The financial burden that accompanies this decline must be distributed over a longer period, to give schools an opportunity to adjust their operations more deliberately and effectively.
- State funding for student transportation and employee retirement above 4.6 percent of wages and salaries outside of schools' base funding and centered on the actual costs of both faced by districts and charter schools.
- The establishment of a state guaranteed-tax base program to subsidize infrastructure costs in low-property-wealth districts. Since charter schools would be unable to access facility subsidies through a GTB program, the state should establish a categorical grant to subsidize charter school rental payments.
- A requirement that districts and charter schools make their contracts with external entities, above a threshold value, publicly available on their websites. This includes contracts between charter schools and their education management organizations, and between districts (or charter schools) and private or public providers of transportation, custodial, food, payroll, and other support services. The state's financial reporting guidelines should also be modified such that district and charter school rental payments are clearly disclosed.
- A search for additional revenues that observes standard economic criteria for "good" taxes, including efficiency and fairness. We view a number of changes as worthy of serious consideration, including lifting or removing the taxable value cap for the property tax, extending the sales tax to services and entertainments, and changing taxes on beer and wine to an ad valorem basis. Michigan's state income tax is currently a 4.25 percent flat rate. The establishment of a graduated income tax

coupled with an increase in the state's earned income tax credit would constitute major improvements in tax fairness, by linking increased revenue to taxpayers' ability to pay.

- Policymakers should also seriously reexamine the merits of tax expenditures that have proliferated over time, including many that impact revenues available for public schools. These include tax exclusions, deductions, deferrals, and credits that benefit specific activities or taxpayers.
- Restoration of voter-approved local district enhancement millages to provide communities with a measure of influence over funding. The state could cap the number of enhancement mills and offset their potential to increase inequality by incorporating an equalizing component among districts that pass enhancement millages.

These proposals reinforce one another. Without additional revenues earmarked for K-12 education, it will be impossible to restore the real value of Michigan's school funding or to adjust revenues to the additional costs of high-needs students. Similarly, unless the current mismatches in revenues and costs are addressed, it is unlikely that additional revenues will be allocated to the most pressing educational needs.

Introduction

Michigan residents over, say, 40 years of age who have not spent much time in public schools since their student days might be surprised by how extensively school operations have changed since then. As in other states, Michigan's public school system developed around locally-governed and operated school districts. Over the last two decades, however, teaching and learning in Michigan's schools have increasingly been shaped by state officials in Lansing. To a far greater extent than in the past, the state now exercises broad control over the funding, curriculum, student assessment, and personnel policies of Michigan's public schools.

In Michigan, the centralization of authority over school funding came first, in 1994, with the passage of a major school finance reform commonly known as Proposal A. This reform established the basic framework for Michigan's school funding that stands to this day. Proposal A shifted control over most K-12 education funding from local voters to the state. The reform predated the advent of test-based accountability policies, and the higher student achievement expectations that have been subsequently established.

As we will explain in the next section, there are very good reasons for states to assume a substantial role in school funding. A system of strictly locally-funded schools would be inherently unfair, because local districts vary greatly in their ability to raise revenues. Nevertheless, state control of school funding is not intrinsically good or bad. It really depends on the funding policies state policymakers adopt. Do they establish policies that support high-performance of students and schools, or are funding policies poorly designed?

Over the last two decades, teaching and learning in Michigan's schools have increasingly been shaped by state officials in Lansing.

It is no secret that Michigan's public school system is struggling. This is starkly revealed in the trajectory of academic outcomes. When Proposal A passed, Michigan students performed above the national average on the National Assessment of Education Progress. In recent years, however, Michigan's NAEP performance has fallen to the bottom tier of states. University of Michigan professor Brian Jacob found that Michigan ranked last among the 50 states in student proficiency improvement between 2003 and 2015.¹ He also showed that after accounting for states' relative affluence, Michigan's adjusted proficiency rates were lower than any other state's. Education Trust Midwest found that Michigan was one of

¹ Brian Jacob, "How the U.S. Department of Education Can Foster Education Reform in the Era of Trump and ESSA," Brookings Evidence Speaks Report 2, no. 7, February 2, 2017. Available at <https://www.brookings.edu/research/how-the-u-s-department-of-education-can-foster-education-reform-in-the-era-of-trump-and-essa/>. Proficiency is measured by a composite of fourth- and eighth-grade scores on the National Assessment of Education Progress reading and math exams.

five states in which fourth-grade reading performance has declined since 2003.² Only West Virginia had a greater decline in reading performance.

It is evident that Michigan needs to seriously reassess its education policies. As we show in this report, significant changes to the way Michigan funds K-12 education will be an essential element of any sustained, broad-based improvement in student outcomes. The educational resources available to Michigan children have been seriously depleted over time.

The Michigan Legislature's design of the Proposal A reforms was a remarkable bipartisan accomplishment. The scale of needed changes to funding policy today, however, is greater than a quarter century ago. Back then, Michigan students' academic performance was regarded as reasonably sound. Proposal A reformers could focus on cutting property taxes and narrowing interdistrict funding disparities, without the significant additional challenge of addressing statewide academic shortcomings.

In retrospect, it is evident that state policymakers have devoted extensive attention to a host of accountability measures over the years—curricular standards, student assessments, teacher evaluations, school turnaround strategies, and more—without corresponding attention to the resources students need to reach expectations. Proposal A reformers never asked how much it costs to educate a student to meet these standards, or how that cost differs for special-needs students.

With this report we hope to inform a broad public discussion to establish a better school funding system in Michigan.

The remainder of the report is organized as follows. [Section 2](#) explains two key school finance concepts, equity and adequacy. [Section 3](#) provides a primer on how Michigan schools are currently funded. [Section 4](#) analyzes trends in the financial support for Michigan schools over time, and why that support has declined. Funding for special education services has become a significant policy problem in Michigan. [Section 5](#) explains why. Michigan's distinctive and highly inequitable approach to school facility finance is described in [section 6](#). In [section 7](#), we consider some key fiscal aspects of school choice policies in Michigan. [Section 8](#) explains and evaluates the methods and recommendations of the 2018 Michigan School Finance Research Collaborative's important school finance adequacy study. Finally, we advance a set of policy recommendations in [section 9](#).

² Education Trust-Midwest, *Top Ten for Education: Not by Chance*, 2018 State of Michigan Education Report. Available at https://michiganachieves.com/wp-content/uploads/sites/12/2018/03/Top-Ten-for-Education-Not-By-Chance_The-Education-Trust-Midwest_March-2016-WEB-FINAL.pdf

SECTION 2

Equity and Adequacy in School Finance

If school finance policy is to rise above political impulses, it must be guided by normative principles. Because education is a key determinant of one's social position, school finance policy is rightly shaped by conceptions of fairness. Two fairness standards, equity and adequacy, have dominated school finance discussions in legal, academic, and policy settings. Equity is the earlier principle; adequacy has become more dominant in recent years. The two principles are closely related. An understanding of these concepts is essential for the design of any high-performance education system.

School finance equity can be conceived in terms of either school inputs or school outcomes. Equity of inputs (also called *horizontal equity*) is a situation in which all students in a state receive the same per-pupil funding. This standard does not mean that all schools are the same. One school, for example, may elect to have small class size, while another opts for teacher aides.

Equity of outcomes, on the other hand, is defined as a situation where all schools have sufficient resources to achieve similar outcomes. The goal of *equal* outcomes is unrealistic, because individual outcomes are dependent on student effort and innate ability. So outcome equity is typically defined as a situation where outcomes (student achievement, or employment readiness) do not vary systematically across children based on circumstances beyond their control, such as race, family income, or gender. Outcome equity in education is equivalent to the goal of equal opportunity.

Equity of inputs (say, per-pupil funding) will not generate equity of outcomes, because the resources necessary to attain a given outcome depend on, among other things, students' background and family characteristics. Students raised in poverty come to school less ready to learn than more advantaged students and require additional support from school. It costs more to educate a low-income than a high-income child to a given education standard. Equity of outcomes, therefore, requires higher funding for students with greater educational needs. This is called *vertical equity*. Vertical equity generates equal average outcomes for various groups of students, though not for individual students in each group.

Adequacy links educational inputs and outputs, combining the horizontal and vertical conceptions of equity. The adequacy standard aims for a finance system in which all students attain a sufficient, minimum level of educational outcome. Adequacy, however, does not preclude outcomes above the adequate standard.

School finance adequacy turns on two questions. First, what constitutes an adequate education? This might, for example, be an education sufficient for someone to participate fully in the economic and political life of a country. In recent years, however, an adequate education has increasingly been defined to mean meeting or exceeding performance expectations on state achievement tests. The second question is, how much does an adequate education cost? Answers to this question require a two-step procedure. First, one

must identify the base spending needed to teach the average student to achieve rigorous proficiency standards, and second identify how much extra spending is needed to address special student needs and local circumstances.

Adequacy relies on a precise definition of “costs,” but one that cannot be directly observed on school district or state financial statements. Costs are defined as the *minimum* funding necessary in order to achieve a given outcome, such as bringing students up to a given achievement level. This requires that schools are using best practices. That is, they are efficient. Poor management or misallocation of resources may increase school spending, but does not change school costs. By definition, variations in costs across schools are due to factors beyond schools’ control.

Significantly, therefore, the concept of school finance adequacy embodies both of the foremost criteria in public policy analysis: equity and efficiency.

Adequacy studies use a variety of methods (discussed in [section 8](#)) to estimate the average (or base) cost of education in a state, as well as additional or differential costs. These added costs arise from four general sources:

- *Special-needs students.* Students who are at-risk, have disabilities, or are English-language learners cost more to educate.
- *Geographic variation in input prices.* The regional cost of living influences employees’ salaries, especially for teachers.
- *District size and population density.* Costs are higher in small-enrollment districts lacking economies of scale, and transportation is more expensive in large-area, low-density districts.
- *Declining enrollment.* Depending on a state’s funding system, district revenues may decline more rapidly than costs with falling enrollment, raising average costs for the remaining students.

It is no accident that adequacy moved to the fore in school finance deliberations in legislatures and courts simultaneously with the advance of the standards-based school accountability policies. Adequate funding is a necessary complement to accountability policy. If schools are held to meet ambitious performance standards, then they must receive sufficient revenues to meet those outcome goals.

From Local to State Control

By international standards, the U.S. education system has always been relatively decentralized. This basic feature has posed serious challenges to attaining equity and adequacy in school finance. These challenges are a prime reason that states have assumed a larger funding role over time.

The U.S. Constitution assigns the federal government no formal role for schools. Each state constitution contains an education clause establishing the state’s authority for the provision of public schools, but historically states delegated most of this responsibility to local school districts. Until relatively recently, local districts had primary responsibility for deciding not only the curriculum, assessment, and personnel policies for their local schools, but also how much to tax themselves to pay for them.

Local control of funding and other aspects of schools has some highly desirable consequences. It permits local citizens' values and preferences to be reflected in school services. It also encourages democratic participation in community affairs. Citizens greatly value this ability to shape local schools. States also have frequently appealed to local control as a worthy principle in school finance litigation, as a defense against claims that their funding systems are inequitable.

Local control of school funding, however, suffers from two great shortcomings. First, local school districts have vastly unequal abilities to pay for schools, generating huge equity problems. Second, with local control there is no assurance that citizens will provide sufficient funding for schools to meet the outcome goals expected by the state, a problem of adequacy. These two problems have forced states across the nation, often in response to court mandates, to assume a larger role in public school finance.

Consider the first problem. The property tax is the only source of tax revenue available to local school districts. The tax base, called "taxable value" in Michigan, varies greatly across local districts. In 2016–17, the median taxable value per pupil among Michigan's local school districts was \$211,971, yet districts ranged from a low of \$31,252 to a high of \$16,236,030 (on Mackinac Island).³

Table 1 illustrates the fundamental inequity of local property tax funding, using a set of Michigan school districts. The table shows the amount of revenue that each district would generate if it levied 34 mills on its actual 2016–17 taxable value per pupil.⁴ For example, by levying 34 mills on its tax base, Bloomfield Hills would generate over \$20,000 per pupil to spend on its schools, while Godfrey-Lee would generate only \$1,680. Several small Michigan districts have higher per-pupil tax bases than Bloomfield Hills.

Table 1. Unequal Local Property Wealth and Revenue Capacity, 2016–17

District	County	Taxable value per pupil	Millage rate (MI average in 1994)	Local property tax revenue/pupil
Northport	Leelanau	\$2,672,416	34.0	\$90,862
Covert	Van Buren	1,956,102	34.0	66,507
Bloomfield Hills	Oakland	601,371	34.0	20,447
Harper Woods	Wayne	62,354	34.0	2,120
Bendle	Genesee	56,165	34.0	1,909
Godfrey-Lee	Kent	49,436	34.0	1,680

This striking inequality in revenues to fund children's educational opportunities is matched by a corresponding inequality for taxpayers. Suppose citizens in both Bloomfield Hills and Godfrey-Lee wanted to raise \$8,000 per pupil. Bloomfield Hills could raise \$8,000 per pupil

³ Strictly speaking, the Detroit Public Schools Community District, formed in 2016 as part of a state restructuring of Detroit's public schools, has no taxable property. The city's taxable value remains with the old Detroit Public Schools district, which no longer educates children but continues as a taxing entity, while the DCSD operates schools.

⁴ A mill represents one dollar of tax payment for every \$1,000 of taxable value. The average millage rate among the state's districts in 1994 was 34 mills. This was last year before Proposal A's passage, after which local districts lost the ability to set their own millage rates.

by levying only 13.3 mills, while Godfrey-Lee would have to levy 161.8 mills. A homeowner in a house with taxable value of \$150,000 in Bloomfield Hills would face an annual tax payment of \$1,995, while the owner of a \$150,000 property in Godfrey-Lee would pay \$24,270 annually in taxes.

In short, if schools were funded entirely with local revenues, districts with lots of property wealth could provide lavish support for their schools while keeping property tax rates very low. In contrast, property-poor districts would have to tax themselves at high rates to raise even relatively small amounts of revenue. This problem has been widely understood since the 1960s, when litigation began in several states challenging the fairness of this way of funding schools.

The second major problem with local funding came into sharper focus over the last two decades as states established explicit outcome standards for public school students. As noted, adequate funding is the flip side of the standards-based accountability policy. If states establish high performance expectations, then schools must have sufficient resources to meet those goals. The adequacy problem associated with local financing of schools incorporates the equity concern we have mentioned, but goes further. Even among districts with identical tax bases, citizens in some districts may set local tax rates too low to provide sufficient revenues. Moreover, many factors beyond local districts' control (e.g., student poverty or disabilities, district size, etc.) affect the cost of meeting state standards. These variations in local costs cannot be fully addressed within a strictly local school-funding system.

Over time, in response to problems of equity and adequacy and to nudges by courts, state governments across the nation have assumed a much larger role in school finance. The pace of change and the extent of remaining local control, however, vary across states. In 1920, local school districts generated 83 percent of K-12 education revenues nationally, while state governments contributed about 17 percent. Today, however, the state funding share (47 percent) surpasses the local share (43 percent). The federal government's funding share increased to about 10 percent in the 1970s and has remained near that level ever since.

A key distinction among states as they assume a larger K-12 funding role is the amount of funding discretion left with the citizens of local school districts. It is possible to design a state funding system based on adequacy principles, while preserving the authority of local districts to tax themselves at higher rates to provide additional education services. Massachusetts is a leading example of this strategy. By contrast, as we explain in the next section, in Michigan expansion of the state's funding role was accompanied by sharp restrictions on local influence over school funding.

This poses a clear trade-off, common in public policy analysis. Michigan citizens have lost the benefits of local control. They are constrained in their ability to have their preferences reflected in the resources available to their children's schools. Was this sacrifice worthwhile? That question can only be answered by reference to how well state policymakers have used their control to establish an equitable and adequate school-funding system. We devote the next several sections of this report to examining this issue.

SECTION 3

How Michigan's Proposal A Funding System Works

Michigan's current school-funding system was created a quarter century ago with the passage of Proposal A. The new system was equal parts tax reform and school-funding reform, and it accomplished what it set out to do. It successfully lowered property taxes and narrowed, but did not eliminate, revenue gaps across districts. The Proposal A reforms, however, never addressed the question of funding adequacy, an omission that has become more damaging over time.

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Proposal A Comes to Michigan

Before 1994, Michigan relied heavily on local property taxes to fund schools. More than 60 percent of education revenues came from local sources, with the remainder provided by the state and federal governments. In 1993, home and business owners were paying, on average, 34 mills for school operations on their properties. Michigan property taxes were among the highest in the nation.

Revenue to educate children also varied dramatically across Michigan's local school districts, due to large disparities in districts' taxable property value, and despite modest efforts by the state to offset these inequities.

Between 1973 and 1993, Michigan operated a guaranteed tax base (GTB) system to supplement the revenue-raising ability of low-property-wealth districts. Under a GTB system the state sets a minimum (guaranteed) property tax base per pupil for all districts, and allows each district to determine its local tax rates. For districts with property wealth below the guaranteed level, the state contributes the difference between revenues actually raised locally and what would have been raised if property wealth were at the guaranteed level.⁵ Districts with property wealth above the guaranteed level are out-of-formula and receive no general state aid. In 1993, 380 districts received some level of state GTB funding, while 177 were out-of-formula.

Reliance on local property taxes and the GTB system produced wide and growing inequities among Michigan school districts over two decades. By 1993, the revenue inequalities among Michigan districts had returned to pre-1973 levels, generating serious concerns about the fairness of the state's school funding. These concerns, plus mounting dissatisfaction with increasing property taxes, established a political context amenable to change.

⁵ A guaranteed tax base system of state aid can be represented by the following equation: $S_i = P_i [(V^* - V_i) T_i]$, where S_i = state aid to school district i , P_i = pupils in district i , V^* = per-pupil state-guaranteed tax base, V_i = per-pupil tax base in district i , and T_i = property tax mills levied by district i .

In a dramatic action, in July 1993, the Legislature approved and the governor signed into law PA 145. This law exempted all real property taxes for school operating purposes starting in 1994. It eliminated approximately two-thirds, or \$6.5 billion, of Michigan's total \$10 billion K-12 school funds. In a remarkable bipartisan effort, the Legislature spent the following four months developing a new school-funding system. These intensive negotiations predated mandatory term limits, so key legislators involved in the planning from both parties benefited from extensive experience in school finance policy.

The legislators developed a plan to replace the guaranteed tax base system with a new foundation system of state aid to local districts. To fund the new system, legislators came up with a ballot initiative known as Proposal A and a "statutory alternative" that would be implemented automatically if the voters rejected Proposal A. The main revenue source identified in Proposal A was a 50 percent increase in the sales tax, while the "statutory alternative" relied mainly on an increase in the income tax. Both plans called for partial restoration of the property tax as a funding source for schools. In March 1994 Proposal A was overwhelmingly approved in a special election.

Key Impacts of Proposal A

Proposal A had four major impacts. First, it produced a large reduction in property taxes along with an increase in the sales tax rate, from four to six percent. According to the Michigan Department of Treasury, Michigan property taxes were 34.4 percent above the national average before Proposal A, and 14.8 percent below the national average after its passage.

Second, Proposal A dramatically centralized Michigan's school finance system. Before Proposal A, nearly two-thirds of education revenues were raised locally. Local school districts' voters set their own property tax rates to fund school operations. Voters could agree to spend as much or as little as they wanted on their schools. Under Proposal A, by contrast, the largest source of school operating revenue is a per-pupil foundation grant that is set each year by the state, while property taxes that districts can levy to support local public schools are fixed by statute. As a result, local districts have lost most control over the amount of money available for their schools. The most important revenue decisions for all public schools are made in Lansing.

Third, Proposal A established a minimum revenue level for Michigan school districts and made funding more equitable. In 1993-94, before the approval of Proposal A, per-pupil spending in the highest-revenue school districts was more than three times higher than spending in the lowest-revenue districts. Under Proposal A the revenue gap has grown steadily smaller. Three-fourths of all school districts now receive nearly the same foundation funding per pupil, while the remaining districts receive somewhat more. The highest-revenue districts now receive about 60 percent more per-pupil than the lowest-revenue districts.

Fourth, Proposal A made school funding "portable" in the sense that revenues follow students. Before Proposal A, school funding was more district centered. Increases in local property value due to new residential or business developments would increase revenues available for local school operations, but, as we will explain, not after Proposal A. Funding portability greatly facilitated the design of Michigan's school choice policies. The state's charter school law (PA 362 of 1993) was developed simultaneously with Proposal A. The

state's interdistrict choice (or open-enrollment) policy that enables students to attend public school districts outside their resident district was introduced three years later.

The Proposal A Foundation System

More states use foundation grant programs to allocate school aid to local districts than any other funding mechanism. Under a foundation program, the state establishes a minimum per-pupil funding level (the foundation grant) for all districts and requires all districts to assess a specified number of property tax mills to help pay for the foundation. The state then provides the difference in funding between the foundation grant level and the revenue raised locally. Consequently, the state's share of the foundation funding is highest in low-property-wealth districts.⁶

Because foundation funding systems can ensure that all districts receive at least a basic level of per-pupil funding, they grew in popularity with the expansion of test-based accountability policies and the adequacy movement. State policymakers face two key choices in the design of a foundation system. First, they must set the funding level of the per-pupil foundation grant and determine whether this amount is uniform across all districts or varies. Second, they must decide if local districts will have discretion to assess additional property tax mills on top of the mills required by the state.

Designers of Michigan's Proposal A system decided to establish different foundation grants for different districts, and to preclude local districts from assessing additional property tax mills to fund school operations.

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Revenues for the School Aid Fund

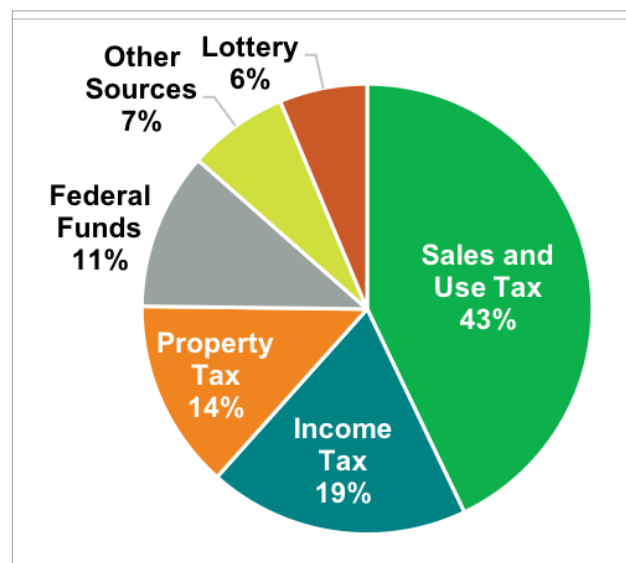
To replace local property tax revenues and to pay for the state's share of foundation grants, Proposal A increased the sales tax and a variety of other taxes, earmarking the new revenues for the School Aid Fund (SAF). Table 2 displays the main sources of revenue for Michigan's public school system, before and after the implementation of Proposal A. All proceeds from the sales tax increase from four to six percent went to the SAF. In addition, 14.4 percent of revenues from the income tax (subsequently increased to 23 percent) were earmarked for the SAF. Significantly, Proposal A established a new statewide education property tax of six mills on all property. A real estate transfer tax of 0.75 percent was introduced, while taxes on cigarettes and other tobacco products were significantly increased as well. All of these revenues were earmarked for the SAF.

⁶ A foundation system of state aid can be represented by the following formula: $S_i = P_i F_i - r V_i$, where S_i = state aid to school district i , P_i = pupils in district i , F = per-pupil foundation grant, r = required local millage rate, and V_i = assessed value of property in district i .

Table 2. Education Funding Sources in Michigan Before and After Proposal A

Revenue source	Prior to reform	Proposal A (at passage)	Proposal A (current)
Sales tax	60% of proceeds from the 4% rate	60% from the 4% rate plus all of the 2% increase	60% from the 4% rate plus all of the 2% increase
Income tax		14.4% of revenue from 4.4% rate (down from 4.6%)	28.4% of total revenue from 4.25% rate
Real estate transfer tax (from selling a property)		All revenue from the 0.75% tax	All revenue from the 0.75% tax
Tobacco tax	\$0.02 of the \$0.25 tax per pack	63.4% of revenue from the \$0.75 tax per pack	41.2% of revenue from \$2.00 tax per pack plus 32% tax on wholesale price for other products
Lottery	Net revenue	Net revenue	Net revenue
State education tax on all property		6 mills	6 mills
Homestead property tax	34 mills (average)	0 mills Except hold-harmless districts	0 mills Except hold-harmless districts
Non-homestead property tax	34 mills (average)	18 mills	18 mills

Figure 1 shows that sales, income, and property taxes currently account for about 75 percent of SAF revenues, with the largest share (43 percent) from the sales tax. Approximately 11–12 percent of SAF revenues come from the federal government.

Figure 1. Revenue Sources for School Aid Fund, FY 2018

Local School District Contributions to Foundation Grants

As noted, local school districts are required to levy property tax mills to supplement the state funding of their foundation allowances.

Proposal A established a classified property tax system under which homestead and nonhomestead property are taxed at different rates. Homestead property consists of owner-occupied primary residences. All other property—including commercial, industrial, and agricultural property, as well as rental residential property and vacation homes—is “nonhomestead” property.

In addition to the six-mill statewide property tax assessed on all property and dedicated to the SAF, Proposal A required local school districts to levy 18 mills on nonhomestead property, with voter approval. Revenues from this nonhomestead property tax remain at the local level and represent districts’ contribution to funding foundation allowances. The state then contributes whatever additional funding is necessary to bring per-pupil funding up to a district’s designated foundation allowance. Increases in a district’s nonhomestead revenue collections are offset by a corresponding decrease in state foundation aid. Consequently, since Proposal A, increases or decreases in a community’s business (or residential) property do not change revenue available for local school operations. As a result, the 18-mill local property tax to support foundation allowances is effectively a state rather than local tax.

Under Proposal A, a small set of districts that had very high spending levels in 1994 are allowed, with local voter approval, to levy additional property taxes on homestead property to maintain their traditional higher spending levels. About 10 percent of the districts in the state are in this “hold harmless” group. Some of these districts, including several in suburban Detroit, are very wealthy. Others are home to large concentrations of valuable nonhomestead property, ranging from vacation homes to nuclear power plants. As we explain further later on, the revenue from local hold-harmless millages allows these districts to maintain higher foundation allowances than other districts. Like all other districts, however, their per-pupil foundation revenue is strictly capped.

Proposal A also capped increases in taxable values to the annual inflation rate or five percent, whichever is lower. Consequently, one of Proposal A’s durable features is to reduce effective tax rates on property wealth whenever market values grow faster than inflation. State equalized values (targeted for 50 percent of market value) are not capped, however. Taxable values are reset to the state equalized value when properties change ownership.

Setting Foundation Allowances for Individual Districts

Foundation revenues are the main source of operating funds for all Michigan public schools. Each district’s foundation allowance is set annually by the Legislature and governor with the passage of the state school aid budget. Throughout the Proposal A era, district foundation allowances have never been based on their operational needs, that is, based on adequacy. Rather, they are based on the amount of revenue in the SAF and the extent to which policymakers decide to narrow funding gaps among districts.

Many Michigan citizens are aware that different districts receive different foundation allowances, but some are surprised to learn that the value of a district’s foundation allowance today is a function of its state and local revenue relative to other districts in 1993–94. Districts have not leapfrogged one another in the funding rank order since then.

The highest-revenue districts today are the same as when Proposal A passed, regardless of changes in local economic development and property wealth or students' educational needs. The difference, however, is that gap between the highest- and lowest-revenue districts is much smaller now.

In addressing funding inequality, Proposal A's planners established a political agreement to "hold harmless" previously high-spending school districts. That is, their per-pupil revenue would not be reduced. This agreement had two main consequences. First, it meant that increased equalization had to be accomplished by "leveling up" (increasing the revenues of low-spending districts), rather than by "leveling down" (decreasing the revenues of high-spending districts). Second, since the total tax revenue earmarked for education under Proposal A fell far short of the amount needed to raise all districts up to the revenue levels of the highest-spending districts, the value of the foundation allowance would continue to vary widely across Michigan districts and gradually narrow over time.

Throughout the Proposal A era, the highest-revenue districts have received significantly higher foundation grants than other districts, but their revenues have increased at a slower rate.

Under Proposal A, the state set three benchmark foundation allowances each year: a "minimum" foundation grant, a "basic" (or target) foundation, and a "cutoff" point for state aid to the high-revenue, hold-harmless districts. Given available revenues, each year the state determines the increase (or decrease) in the basic foundation allowance. Every district at or above the basic foundation receives the same dollar increase as the basic foundation.

To narrow the funding gap, between 1995 and 2000, districts at the minimum foundation received at least twice the dollar increase in the basic foundation. Between 2001 and 2007, the Legislature suspended the funding narrowing, giving all districts the same per-pupil dollar increase. This uniform per pupil increase, however, represented a smaller percentage growth in revenue for high-spending districts than lower-spending districts. The 2X formula was reinstated for districts below the basic foundation in 2008. Also in 2008, the basic foundation was increased to the state funding cutoff for hold-harmless districts. Table 3 displays the distribution of local districts by foundation allowance group in 2017-18.

**Table 3. Foundation Allowances by School District Group, 2017–18
(excludes charter schools)**

Group	Foundation level	Number of districts
At minimum	\$7,631	405
Between minimum and basic/ hold-harmless cap	\$7,632–\$8,288	77
At or above basic/hold-harmless cap	\$8,289	59

Before Proposal A's passage, districts with the lowest state plus local funding were primarily in rural areas. Consequently, rural districts on average enjoyed the largest revenue gains in the early years of Proposal A. About 300 of Michigan's school districts are in rural areas, and they enrolled 22 percent of all district students in 2001. Between 1994 and 2002 the inflation-adjusted per-pupil foundation allowance increased at an annual rate of 2.5

percent.⁷ Meanwhile the growth rate of real foundation allowances in high-income suburban districts was essentially 0, that is, nominal foundation allowances increased on average at the rate of inflation. The corresponding growth rates for low- and middle-income suburban districts and urban districts were all slightly below 1.0 percent.

In more recent years, the rates of foundation change have become more uniform across Michigan districts, as is evident from the grouping of districts in Table 3. As we discuss in [section 4](#), they have also failed to keep pace with inflation.

Charter Schools

Michigan charter schools (also designated as “public school academies,” PSAs) receive their foundation revenues entirely from state funds. Charters do not have fixed geographical boundaries and cannot levy property tax mills to help fund their foundation allowances. Because they cannot levy debts mills, charter schools typically finance their facility costs out of operating revenues. Charter schools’ foundation allowances are equal to the lesser of the per-pupil foundation allowance of the district in which they are located or the PSA maximum foundation (\$7,631 in 2017–18).

Other Revenue Sources for Michigan Public Schools

The Legislature and governor allocate SAF revenues each year to a variety of categorical grants and special purposes. The share of the SAF devoted to foundation grants has declined from over 75 percent in the early years of Proposal A to 63 percent in 2017–18.

State Special and Categorical Grants

The State School Aid Act earmarks the SAF to over 50 grants to help local districts and charter schools fund specific programs. Categorical grants cannot be used for any purpose other than the purpose identified in the grant. In most cases, regulations or administrative rules specify how these state dollars must be spent. Special and categorical spending fluctuates over time with policymakers’ priorities. The 2017–18 budget included, for example, spending on the Michigan Public School Employee Retirement System (nine percent), and early childhood education (two percent).

A few noteworthy categorical grants help districts and charter schools deliver services to high-need students.

Special Education

State funding for special education services comprised seven percent of the school aid budget in 2017–18. Under a formula determined in the 1997 *Durant v. State of Michigan* settlement, the state reimburses 28.6 percent of approved special education expenditures by local districts and charter schools, and 70.4 percent of spending on special education transportation. Special education funding has emerged as a major concern in recent years, because special education funding from state, federal, and other sources falls substantially short of required special education spending by local districts. Consequently, the provision

⁷ David Arsen and David N. Plank, “Michigan School Finance under Proposal A: State Control, Local Consequences,” November 2003. Available at <http://www.mipfs.org/files/Arsen%20&%20Plank%202003.pdf>.

of special education services encroaches on district funds available for regular education students. We devote [section 5](#) of this report to a fuller examination of this important issue.

At-Risk

The Proposal A financial reform package created a new categorical grant to help fund services for low-income, at-risk students. Initially, funding for this grant program was intended to increase the foundation allowance for students in poverty (those eligible for the National School Lunch Program) by 11.5 percent, or an additional weight of 0.115, in eligible districts. Hold-harmless districts were not eligible for the at-risk funding. The additional weight of 0.115 is very low by comparison to prevailing estimates of the additional costs of educating students in poverty.⁸

The state's funding of the at-risk categorical program over subsequent years, however, was insufficient to sustain this original goal. By 2015-16, funding for the at-risk categorical amounted to an effective foundation weight of about 0.05. Funding for at-risk students in 2017-18 comprised three percent of the school aid budget.

English Language Learners / Limited English Proficiency

About 95,000 Michigan students are identified as English-language learners (ELL). Michigan schools receive additional funding to serve ELL/LEP students from two primary sources: about \$15 million in federal Title III funds and about \$6 million in state Section 41 grants.

ELL and LEP students are identified based on federal guidelines, including whether the student speaks a language other than English at home and his or her score on the WIDA (World-Class Instructional Design and Assessment), which measures students' ability to read, write, listen to, and respond in English. Students who have lived in the United States for three years or less are designated as immigrants. Roughly 85 percent of Title III funds are earmarked for ELL/LEP students and 15 percent for immigrant students. Title III funds can only be used for core instruction and service programs that support the acquisition of English-language skills.

School districts obtain the state's Section 41 bilingual education grant funds through application. Not all districts with eligible students apply for funds. Section 41 funding is based on a student's WIDA test score.

Federal Categorical Grants

The federal government provides funding for several categorical grants. The largest federal programs are targeted for services for low-income students (e.g., Title 1), special education (e.g., Individual Disabilities Education Act), the federal school lunch program, and teacher quality initiatives.

Intermediate School District Revenues

Proposal A permits voters in an intermediate school district (ISD) to levy up to three "enhancement" mills to fund school operations. ISD enhancement millages must be

⁸ William Duncombe and John Yinger, "How Much Does a Disadvantaged Student Cost?" *Economics of Education Review* 24, (2005): 513-532.

approved by a majority of the electors in the ISD, and the revenues must be shared across districts on an equal per-pupil basis. Only seven of Michigan's 56 ISDs currently levy an enhancement millage for operations: Kalamazoo, Kent, Midland, Monroe, Muskegon, Ottawa, and Wayne. All ISDs levy general operating millages, all of which are below 0.5 mills. Slightly more than half of ISDs levy vocational education millages, and nearly all of these are below two mills.

ISDs can also request voter approval to assess mills specifically to fund special education services. The number of special education mills an ISD can levy is capped by the state. As we will explain in [section 5](#), this cap varies across ISDs based on the number of special education mills the ISD levied when Proposal A passed in 1994.

Local District Debt and Sinking Fund Revenues

Proposal A did not address funding for school facilities and infrastructure. In contrast to most states, the state of Michigan provides no funding for facilities in local districts. Facilities are funded entirely by local property tax revenues. School districts, with voter approval, can levy debt or sinking fund mills to pay for facilities and capital improvements.

So while funding for school operations in Michigan is highly centralized, funding for facilities is highly decentralized. As a result, inequalities in local property wealth are fully reflected in local districts' ability to provide school facilities and durable equipment. Without question, Michigan's school facility funding generates serious equity and adequacy problems, which we examine in greater detail in [section 6](#).

Is Michigan School Finance Equitable and Adequate? An Initial Assessment

We can offer a preliminary assessment of the Proposal A's impact on the equity and adequacy of Michigan's school finance. The new foundation system improved horizontal equity by narrowing variations in per-pupil revenue across local districts. Remaining horizontal inequities are mainly due to higher foundation revenues in the wealthiest 25 percent of Michigan's districts. These are the same highest-revenue districts as when Proposal A passed. Since residents of most of these high-revenue districts are relatively affluent, this violation of horizontal equity also violates vertical equity, or the principle that those with more need receive more resources.

In terms of adequacy, the Proposal A system gets a mixed review that has become substantially less favorable over time. The most positive feature was Proposal A's establishment of a floor, or minimum funding level, for every Michigan district and charter school. Foundation levels, however, were never calibrated to the resources needed to educate students to certain standards. Moreover, as we detail in the next section, the real value of the foundation allowances has fallen sharply over the last 15 years. So even if the basic foundation allowance was roughly adequate in the early Proposal A years, it is far less so now.

Proposal A devoted very little attention to addressing cost differentials associated with student or district characteristics. As we show in [section 4](#), support for high-cost, at-risk students has diminished relative to eligible student need.

Proposal A never addressed special education and school facility finance. Now both pose major equity and adequacy problems, which clearly need state policymakers' attention. We consider these two issues further in [sections 5](#) and [6](#).

SECTION 4

Trends in Financial Support for Michigan's Public Schools

Proposal A's designers advanced the premise that all school districts would be held harmless with the transition to the new funding system. This certainly provided welcome assurance to Michigan citizens as they relinquished control of their local schools' funding to state policymakers. After nearly a quarter century, we can now see how that has worked out. In the first several years after Proposal A's passage, funding for Michigan schools increased strongly. Over the last 15 years, however, real funding has declined sharply.

Adjusting for Inflation

Government agencies and the media often report school revenue trends over time in nominal terms, that is, expressed in the raw dollar values of each year. Assessments of funding adequacy, however, must rely on trends in real (or inflation-adjusted) revenue that account for changes over time in the purchasing power of money. There is no doubt that total (nominal) revenues to support Michigan's K-12 school have increased substantially since 1994. The relevant question, however, is how much schools can purchase with that money. That is, how have real revenues changed?

The conversion of nominal to real dollars is common in economic analyses and requires use of the proper price deflator. Price deflators measure changes in the price level of goods and services from year to year. The consumer price index, generated by the U.S. Bureau of Labor Statistics, is well known as the composite measure of inflation for a fixed basket of household consumption items.

The CPI market basket, however, is poorly matched with what K-12 public schools spend money on. Compared to the CPI basket, school purchases are far more concentrated in labor services than goods and far less concentrated in expenditures on housing and food. The best available deflator for school district finances is the U.S. Commerce Department's GDP price deflator for state and local government purchases.⁹ We use this price index to adjust education revenues for inflation in this section.

⁹ The GDP deflator for state and local government purchases and CPI differ in two important ways: (1) they reflect a different set of prices and (2) they weight prices differently. First, the CPI measures the prices of a standard basket of goods and services purchased by consumers, whereas the GDP deflator measures the prices of all goods and services purchased by state and local governments. An increase in the price of services bought by school districts, but not included in the consumer basket, will show up in the GDP deflator, but not in the CPI. Also, imports are an important portion of consumer purchases, so import price changes are reflected in the CPI. But imports are not part of GDP, and changes in their prices do not affect the GDP deflator. Second, the indexes differ in the weights assigned to different purchases. In stark contrast to the composition of government purchases, over 40 percent of the CPI is based on housing expenditures. Household expenditures on transportation and food and beverages comprise an additional 30 percent of the CPI. Also, whereas the CPI is computed using a fixed basket of goods, the GDP deflator allows the basket of goods to change automatically over time as government purchases change.

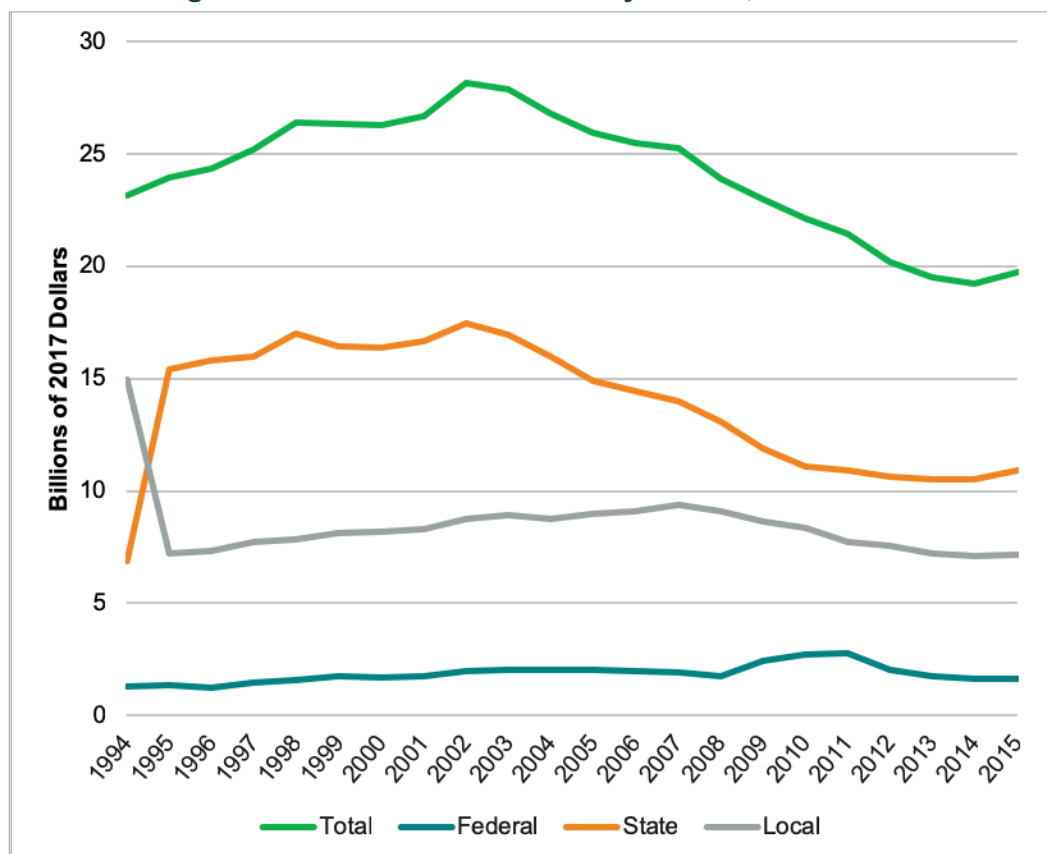
Trends in Total Revenue for Michigan's Public Schools

Figure 2 displays the trend in total real revenue for Michigan public schools since the passage of Proposal A. The figure includes all revenues of Michigan's local and intermediate school districts and charter schools. It includes all revenues for operations and capital facilities, and revenues from all sources, federal, state, and local. The data come from the National Center for Education Statistics (F-33 Common Core of Data) and are the most recent available.

From 1994 to 2002 total revenue increased by 21 percent to 28.1 billion (in 2017 dollars). But since 2002 total revenue has been on a downward trajectory, falling to \$19.7 billion by 2015, a 30 percent decline. Consequently, by 2015, total revenue for Michigan public schools was 14.8 percent below the level when Proposal A passed in 1994.

Figure 2 also shows that state funding, which fell by 38 percent between 2002 and 2015, was primarily responsible for the fall in total real revenues. Seventy-four percent of the total revenue decline from 2002 to 2015 was due to declining state revenues. Local funding, meanwhile, fell sharply with the shift in funding responsibilities to the state in 1995, but increased steadily thereafter until the Great Recession in 2008 depressed Michigan property values and local property tax collections.

Figure 2. Total School Revenue by Source, 1994–2015

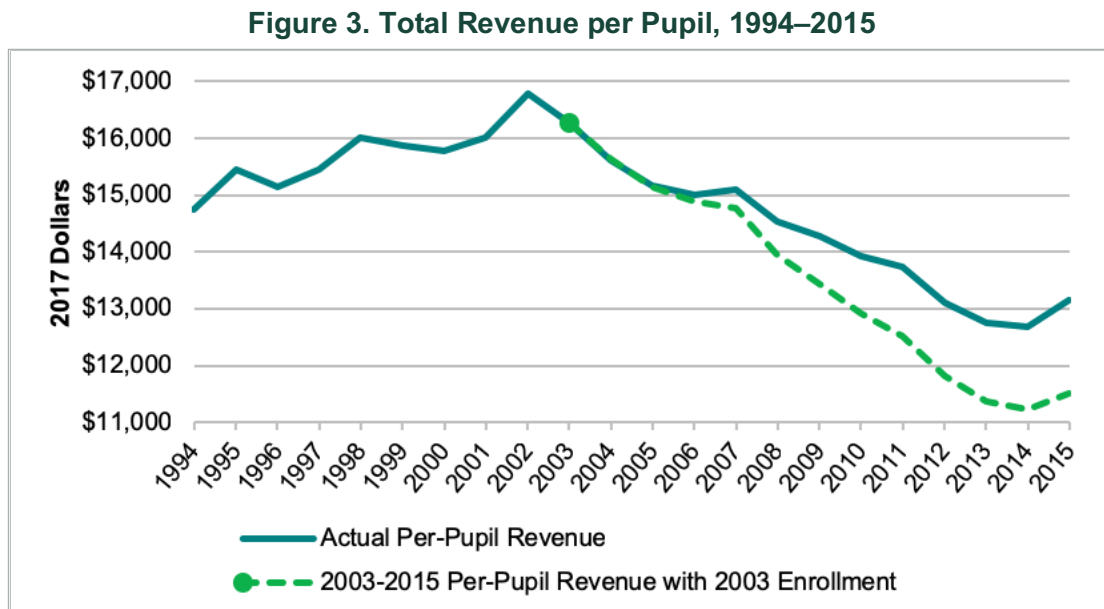


Source: National Center for Education Statistics, F-33 Common Core of Data.

Figure 3 displays the trend in total *per-pupil* real revenue for Michigan's schools. The numerator in Figure 3 is the same aggregate funding measure as in Figure 2. The per-pupil revenue trend is very similar to the total revenue trend. Per-pupil revenues increased during the first eight years of Proposal A, peaking in 2002, and then declined substantially thereafter, before increasing modestly in 2015.

The 22 percent decline in real per-pupil revenue between 2002 and 2015 is less than the corresponding decline in total revenue (30 percent). This is because Michigan's statewide K-12 enrollment fell substantially during this period. While enrollment decline decreases funding for individual districts or charter schools, for the state as a whole, declining enrollment increases the per-pupil funding associated with any given level of total revenue.

During the time period represented in Figure 3, Michigan's K-12 enrollment peaked at 1.7 million students in 2003-04. The dotted line in Figure 3 shows the 2003 to 2015 trend in per-pupil revenue had enrollment remained constant at its 2003 level. Had enrollment not declined, per-pupil revenue would have fallen by roughly 32 percent between 2002 and 2015.¹⁰ Consequently, enrollment decline saved the state from an additional 10-percentage-point decline in per-pupil revenue.



Source: National Center for Education Statistics, F-33 Common Core of Data; and Michigan Fall Head Count.

Trends in Foundation Allowance Revenue

Foundation allowance revenue has a special status among the total revenues depicted in Figures 2 and 3. Unlike state or federal categorical grants or facility-funding revenue generated at the local level, districts and charter schools are free to spend foundation revenue as they wish. They may decide to increase teacher salaries, purchase new

¹⁰ This estimate does not account for the fact that with higher enrollment Michigan's federal funding would have been somewhat higher.

textbooks, reduce class size, or improve counseling or custodial services. By contrast, most other revenues are restricted to particular uses such as special education or facility upgrades.

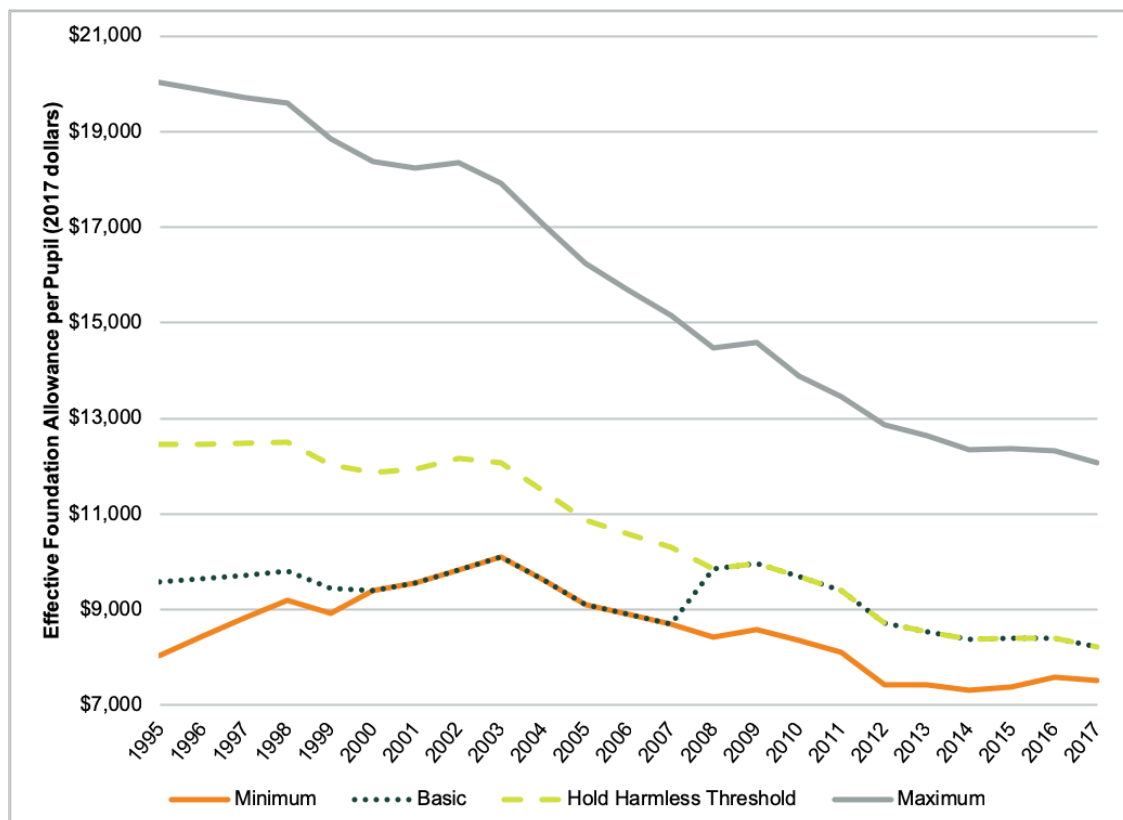
As noted in [section 3](#), Michigan has maintained multiple foundation categories in order to narrow funding gaps across districts over time. Most of this narrowing was accomplished in the first decade following Proposal A's passage.

The basic foundation is the state's target funding level, although some districts have had lower or higher foundation allowances. From 1995 to 2002, the basic foundation increased, in nominal terms, on average \$185 per year. Over the next 15 years, however, from 2003 to 2018, it increased on average only \$26 per year. This is substantially below the rate of inflation.

Figure 4 shows this decline in the real value of foundation grants over time. The decline is clearly greatest for the high-revenue, hold-harmless districts. The vertical distance between the trend lines for the "hold-harmless threshold" and the "maximum" foundation represents revenue from local hold-harmless millages. Michigan's highest-revenue districts have experienced a nearly uninterrupted drop in their foundation grants' value over the entire Proposal A period. The maximum foundation fell by 39.8 percent between 1994 and 2017.

Nevertheless, most districts' inflation-adjusted foundation allowances increased in the early years under Proposal A. Since 2003, however, the basic foundation allowance has fallen by 18.5 percent, while the minimum foundation declined by 25.6 percent.

Figure 4. Michigan Foundation Allowances, 1995–2017



Source: Michigan Department of Education, "State Aid Foundation Allowance Parameters."

Annual Foundation Allowance Increases and Decreases

The foundation grant trends in Figure 4 adjust for inflation, but they are based on the statutory allowances set by the state. The figure does not, however, include periodic nonstatutory reductions in the foundation allowance. For example, while the (nominal) per-pupil foundation grants remained unchanged for three consecutive years from 2003 to 2005, districts and charters did not receive all of those funds. The Legislature and governor approved \$74 per-pupil pro rata reductions in both 2003 and 2004.

Similarly, in 2010 and 2011, the Legislature left foundation allowances unchanged at the 2009 levels, but districts were not actually funded at the 2009 foundation levels. Foundation payments for all districts and charter schools were reduced by \$154 per pupil in 2010 and reduced another \$16 in 2011. Consequently, nominal per-pupil foundation payments in 2011 were \$170 below the 2009 level.

These reductions, however, were not statutory rollbacks of foundation allowances until Governor Snyder's first budget deliberations in 2011, when foundation allowances for all districts and charter schools were cut an additional \$300 on top of the previous \$170, for a total statutory reduction in foundations in 2012 of \$470 below their 2009 levels.

Foundation allowance increases since 2012 have yet to restore the \$470 reduction made that year. The nominal basic foundation in 2018 (\$8,289) remains \$200 below the 2009 basic foundation.

Foundation allowance increases since 2012 have yet to restore the \$470 reduction made that year. The nominal basic foundation in 2018 (\$8,289) remains \$200 below the 2009 basic foundation of \$8,489. Adjusted for inflation, this represents a 16.7 percent decline in the foundation grant's value over less than a decade (2009 to 2018).

District Enrollment Change

Because the state distributes foundation revenue to school districts on a per-pupil basis, districts' financial prospects depend on the interaction between (1) changes in the per-pupil foundation allowance, as discussed previously, and (2) changes in enrollment. Indeed, enrollment decline at the local level has introduced substantial revenue volatility for districts and charter schools across the state.

Table 4 displays changes in enrollment, foundation grants, and total foundation revenue by school district type. As noted, much of the improvement in the horizontal equity of per-pupil foundation grants occurred between 1994 and 2002, but the narrowing continued during the 2002–13 period. This is indicated, for instance, by a larger gain in nominal per-pupil foundation grants in formerly low-spending rural districts (9.2 percent) than high-income suburban districts (4.8 percent). For all community types, however, the growth of per-pupil funding fell substantially shy of inflation, producing average declines in real per-pupil foundation grants from 2002 to 2013 in excess of 25 percent in all district groups.¹¹

¹¹ David Arsen, Thomas DeLuca, Yongmei Ni, and Michael Bates, "Which Districts Get into Financial Trouble and Why? Michigan's Story," *Journal of Education Finance* 42, no. 2 (2017): 100–126.

Table 4. Change in Foundation Grants and Enrollment by School District Type, 2002–13

School district type	% change enrollment	% change nominal per-pupil foundation grant	% change real per-pupil foundation grant	% change nominal total foundation revenue	% change real total foundation revenue
Central city	-26.6	6.7	-27.2	-21.6	-46.5
Low-income suburb	-7.9	6.8	-27.1	-1.2	-32.6
Mid-income suburb	0.1	7.6	-26.6	7.7	-26.5
High-income suburb	5.8	4.8	-28.5	10.8	-24.4
Rural	-14.7	9.2	-25.5	-6.9	-36.5

Source: David Arsen, Thomas DeLuca, Yongmei Ni, and Michael Bates, “Which Districts Get into Financial Trouble and Why? Michigan’s Story,” *Journal of Education Finance* 42, no. 2 (2017): 100–126.

Differential patterns of district enrollment change, however, had a much greater impact on total foundation revenue available to local decision-makers. Over a span of 11 years, Michigan’s central-city districts lost more than a quarter of their enrollment, producing an average decline of 21.6 percent in total foundation revenue, or a striking 46.5 percent revenue decline in real terms. Meanwhile, enrollment growth mitigated the funding squeeze in high-income suburbs. As indicated in the final column of Table 4, however, average total real foundation revenue declined substantially over the last decade in all types of communities.

As noted in [section 3](#), declining enrollment poses a serious financial challenge for local districts and charter schools, because their revenues decline more rapidly than their costs. Some costs are fixed in the short run. Consequently, districts with declining enrollment must reduce spending on services for students left behind, draw down their fund balances, or both.

In fact, districts have drawn down their fund balances significantly. The aggregate fund balances for all Michigan districts and charter schools, adjusted for inflation, declined by over half from \$2.7 billion in 2002 to \$1.0 billion in 2013. This corresponds with a fivefold increase in the average number of districts with end-of-year general fund deficits after 2000 compared to 1996–2000.¹²

Trends in At-Risk Funding

Michigan’s school revenue downturn is also evident in a variety of categorical grants designed to support services for high-need students. Among the most important is funding for at-risk students, which the state supports through Section 31a earmarked funding. The state’s at-risk definition includes students who are from low-income families or families with

¹² Arsen et al., “Which Districts Get into Trouble.”

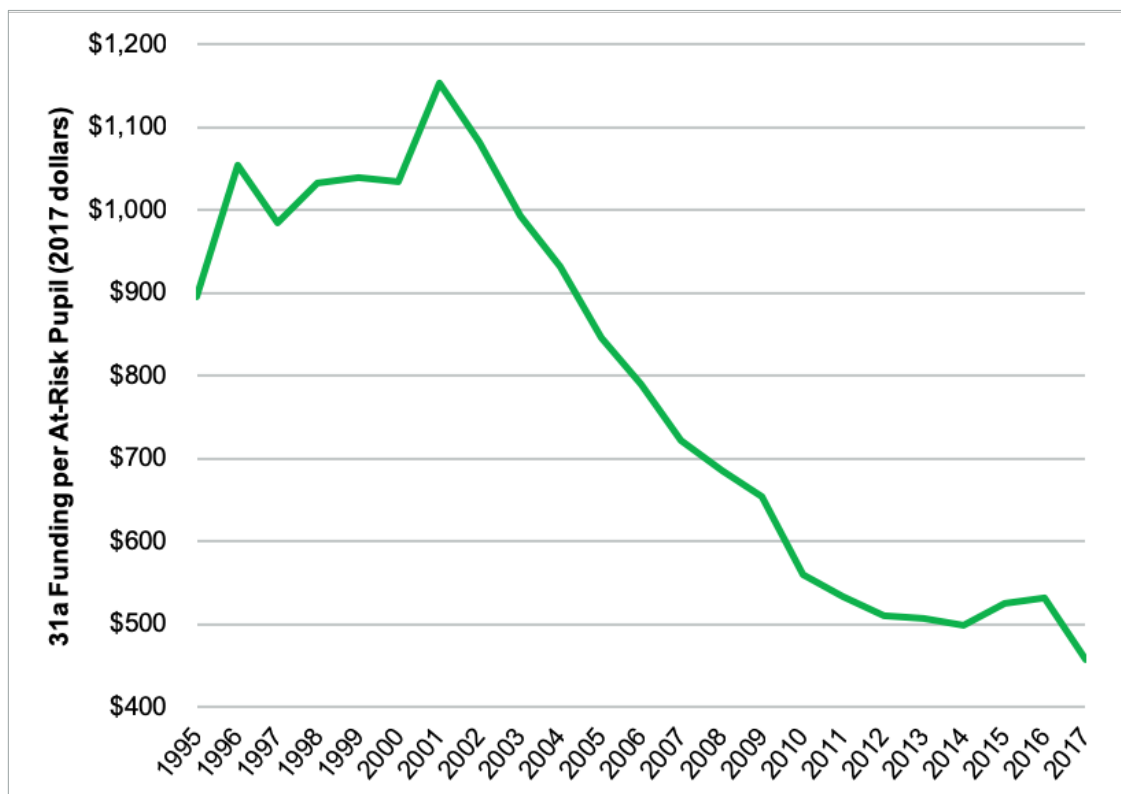
histories of incarceration or substance abuse, who are victims of child abuse, or who are teenage parents.

Despite Michigan's declining total statewide enrollment, the number of at-risk students has increased significantly, from 490,050 in 1995 to 676,483 in 2017. Nearly half of Michigan students are now classified as at-risk. The share is far higher in many districts and charter schools.

Yet despite the growth in student need, Section 31a funding has declined sharply in real terms. Figure 5 shows Michigan's at-risk funding per at-risk student from 1994 to 2017 in 2017 dollars.

Since 1995, total real at-risk funding has declined by 30 percent. Meanwhile, Section 31a funding per at-risk student has plunged by over 60 percent from its peak in 2001. This is not a record that reflects serious concern by state policymakers for the needs of Michigan's most vulnerable students.

Figure 5. At-Risk Funding per At-Risk Pupil, 1994–2017



Source: Michigan Department of Education.

Michigan's Revenue Trend in National Perspective

Michigan's real K-12 education funding is clearly much lower than in the past, but how does this compare to trends in other states? In the new knowledge economy, Michigan competes with other states in providing the skilled workforce that employers demand. Have other

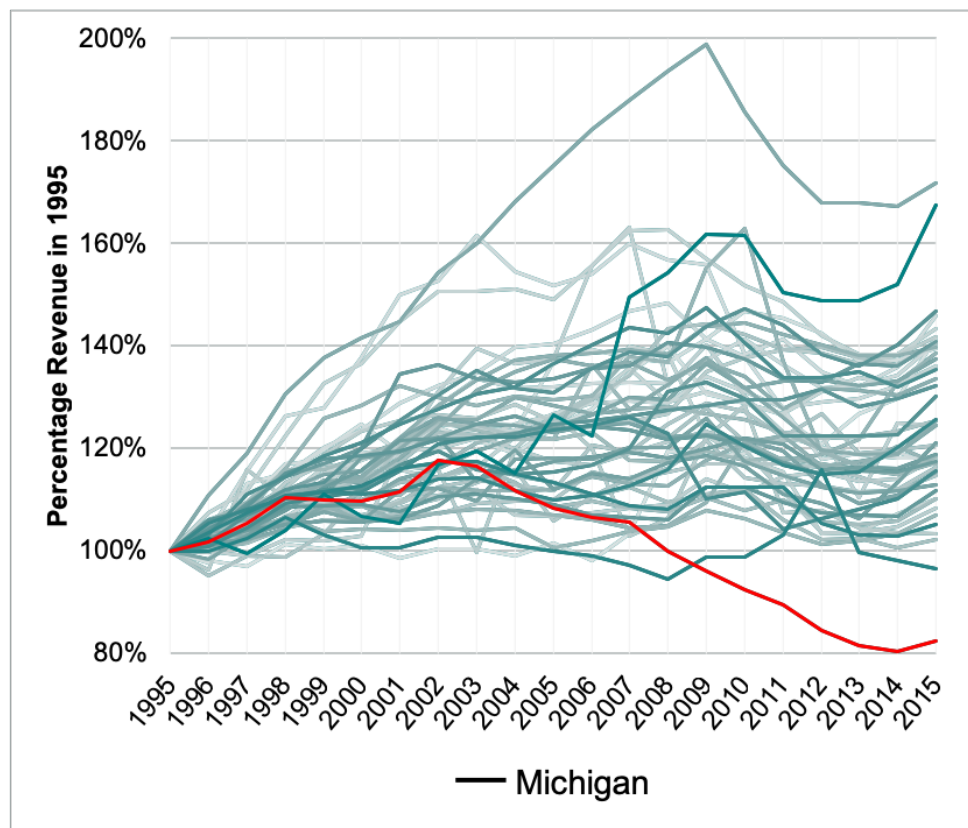
states similarly retrenched education funding just as employers' skill demands have increased?

Figure 6 shows total education revenue for each state, adjusted for inflation, as a percentage of that state's education revenue in 1995. As in Figures 2 and 3, Figure 6 includes all revenues from all sources. Between 1995 and 2015, Michigan was dead last in revenue growth—50th out of 50 states. Michigan's 2015 education revenue was only 82 percent of the state's 1995 revenue.

Between 1995 and 2015, Michigan was dead last in revenue growth—50th out of 50 states.

Equally striking is the gap between Michigan and the next lowest state, West Virginia, where 2015 revenue was 97 percent of the 1995 level. In every other state, inflation-adjusted revenue in 2015 was higher, often much higher, than in 1995. Few states ever dipped below 100 percent over the two decades.

Figure 6. Inflation Adjusted Total K-12 Education Revenue as Percentage of 1995 Revenue, 50 States



Source: National Center for Education Statistics, F-33 Common Core of Data.

Figure 6 tracks total revenues, but the trajectory of Michigan's per-pupil real revenue relative to other states fares little better. Although Michigan's post-2003 enrollment decline muted the decline of per-pupil revenue, the state nevertheless ranks in the very bottom tier of states in terms of per-pupil revenue growth. Between 1995 and 2015, Michigan's real per-pupil revenues declined by 13 percent, placing the state 48th among the 50 states.

Michigan's extraordinary slide in K-12 education funding is all the more striking because it occurred simultaneously with the state's establishment of ambitious curricular and achievement standards for children. The standards-based accountability movement has brought historic and fundamental changes to U.S. public schools. But while most other states have accompanied increased outcome expectations with increased resources to meet them, Michigan policymakers have reduced resources.

While most other states have accompanied increased outcome expectations with increased resources to meet them, Michigan policymakers have reduced resources.

Although Michigan is the national leader in educational belt-tightening, it has only fallen to the middle of the pack in per-pupil funding *levels*, at 25th out of 50 states. Some have suggested that this middling status eliminates funding from the possible causes of Michigan's precipitous fall to the bottom rank of states in student achievement. This reasoning, however, is mistaken, because it neglects the harmful consequences of sustained reductions in resources on organizational performance. Moreover, as we have noted, because costs do not decline proportionately with spending cuts, resources needed for effective performance are further depleted.

Business scholars use resource dependence theory to analyze how access to external resources affect organizational behavior and how the loss of resources can imperil organizational performance.¹³ In business settings, the loss of external resources may trigger a host of strategic initiatives such as price adjustments, production relocation, or forming joint ventures, interlocking directorates, or mergers and acquisitions. Resource declines also have deleterious impacts on public school organizations, but by comparison to business firms the range of strategic responses available to them is much more limited.

For too long, Michigan's school leaders have been preoccupied with imperatives to reduce spending even if it diminishes the quality of services. Arresting the state's decline in real funding would permit more single-minded attention to improving student outcomes.

Why Has Real Revenue Declined?

We answer this question in two steps. The first is a partial explanation that focuses on shifts in revenues between the state's General Fund and School Aid Fund (SAF). These shifts are a consequence of the second and more fundamental cause—Michigan's declining tax effort.

Transfers between the SAF and the General Fund

At \$13.2 billion, Michigan's SAF budget is currently larger than the state's General Fund budget of about \$10 billion. The General Fund covers most of the state's discretionary spending other than K-12 education, including roads, universities, state police, and health care. Adjusted for inflation, the General Fund budget has declined by a third since 2000, a

¹³ Jeffrey Pfeffer, J. and Gerald R. Salancik, *The External Control of Organizations: A Resource Dependence Perspective*, (New York, NY, Harper and Row, 1978).

larger percentage decline than the SAF budget. General Fund revenue decline, however, has indirectly impacted Michigan's K-12 school funding.

When Proposal A was approved, the Legislature's intention was to determine annual increases in foundation allowances based on increases in SAF revenues, adjusted for changes in enrollment.¹⁴ From the start, however, the revenues earmarked for the SAF under Proposal A fell short of the funds needed to meet the state's funding commitments to public schools. The difference between the amounts promised to schools by the Legislature and the funds available in the SAF was made up each year with revenues from the state's General Fund budget.

In both the 1995 and 1996 fiscal years, more than \$650 million in General Fund revenues were allocated to the SAF (nominal dollars). Between 1995 and 2003 these supplemental appropriations averaged about \$560 million per year, or \$5 billion over this span. This comprised about six percent of SAF revenues.

Nothing in Proposal A required General Fund contributions to the SAF. These discretionary transfers depended on specific appropriations by the Legislature. Indeed, subsequently the Legislature sharply curtailed these transfers in response to declines in General Fund revenues. Substantial cuts in the single business tax and income tax in 2000 and 2001, representing about 14 percent of General Fund revenue, contributed to a structural deficit in the General Fund by 2004.¹⁵ The Great Recession placed further strain on General Fund collections in 2009 and thereafter. Large reductions in the Michigan Business Tax and other fiscal policy changes in 2011 placed further strain on the state's General Fund. As a result, net transfers from the General Fund to the SAF ended.

The use of \$600 million of SAF revenue to fund former General Fund spending represents a decline (in nominal terms) of over \$1.2 billion annually in state revenues devoted to K-12 education, or over \$850 per pupil.

More recently, however, net transfers between the state's two major funds have gone in the other direction, as portions of the state's postsecondary education budget that were formerly financed through the General Fund are now funded with SAF revenues. Although relatively small sums are still transferred from the General Fund to the SAF, in recent years, over \$600 million in SAF revenues have been allocated annually to higher education and community colleges.¹⁶

Consequently, in comparison to the early Proposal A years, when over \$600 million were transferred from the General Fund to the SAF, the use of \$600 million of SAF revenue to

¹⁴ For further discussion see C. Philip C. Kearney and Michael F. Addonizio, *A Primer on Michigan School Finance*, 4th ed. (Detroit: Wayne State University Press, 2002), 23, 30.

¹⁵ Citizens Research Council, "A Recap of the FY2004 Budget and a Look Ahead to FY2005 and Beyond," October 2003. Available at www.crcmich.org.

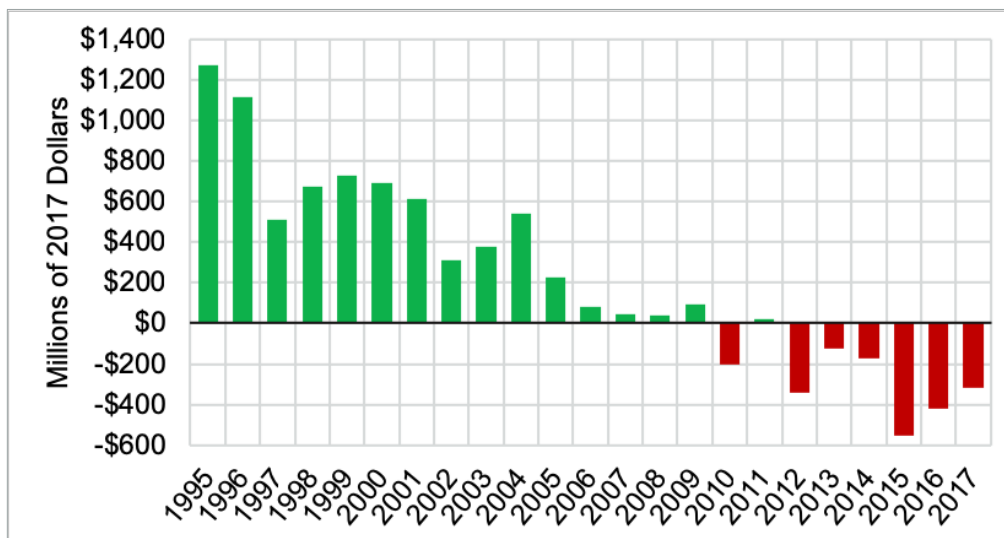
¹⁶ Since a small amount of funding is still transferred from the General Fund to the SAF, the *net* transfer of funds from the SAF to the General Fund is less than the one-way transfer. Further discussion is available in Peter Ruark, "A Hard Habit to Break: The Raiding of K-12 Funds for Postsecondary Education," Michigan League for Public Policy, August 2018. Available at https://mlpp.org/wp-content/uploads/2018/08/a-hard-habit-to-break_the-raiding-of-k-12-funds-for-postsecondary-ed-rev-2.pdf.

fund former General Fund spending represents a decline (in nominal terms) of over \$1.2 billion annually in state revenues devoted to K-12 education, or over \$850 per pupil.

When adjusted for inflation, as in Figure 7, the yearly transfers between the General Fund and the SAF represent a net decline in K-12 funding of nearly \$1.6 billion between 1995 and 2017. Figure 7 does not include substantial additional revenues lost to the SAF in recent years due to state law changes affecting tax exclusions and abatements. Nor does it reflect the Legislature and governor's 2018 lame duck session transfer of \$500 million in SAF revenues to fund income tax refunds, coupled with a reduction in use of SAF revenues for higher education.

For some time now, state officials have relied on the School Aid Fund as a slush fund in state budgeting.

Figure 7. Net Transfers from General Fund to the School Aid Fund, 1995–2017



Source: Michigan House and Senate Fiscal Agencies

Declining Tax Effort

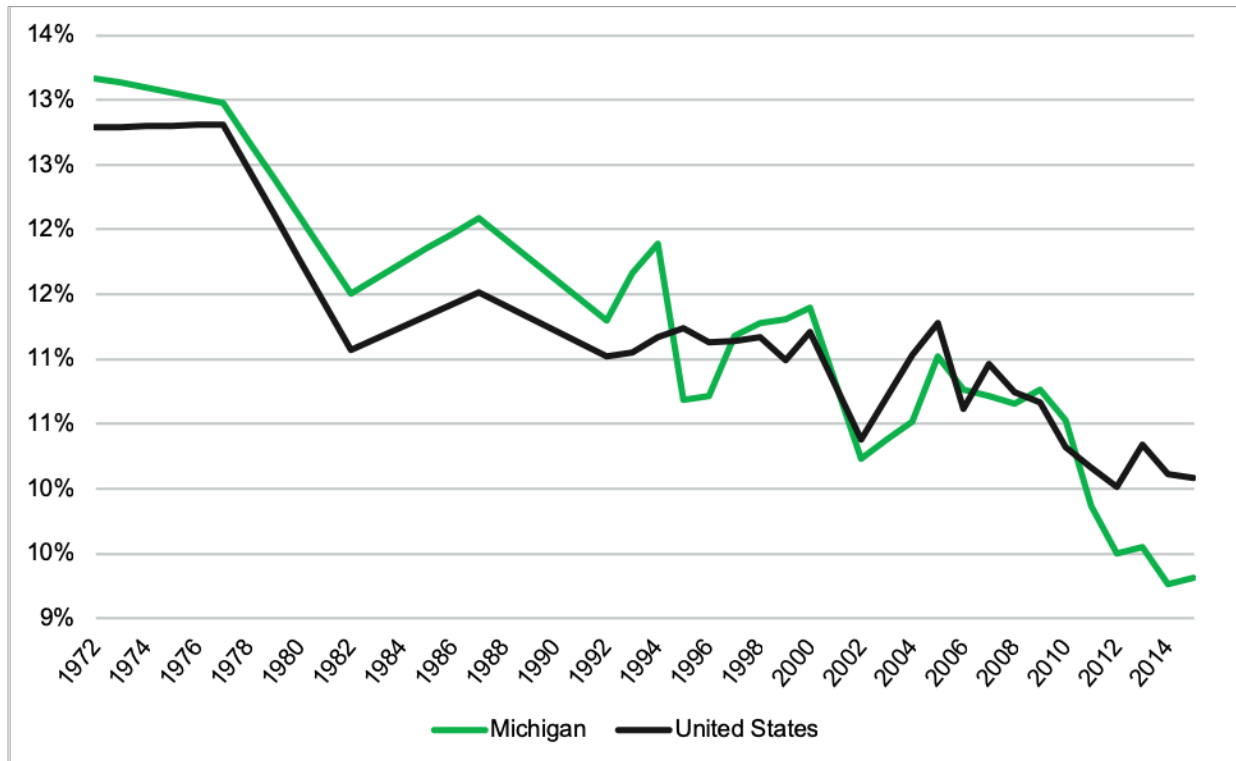
Michigan's plunge in real public school funding is not because the state is poorer than in the past. Michigan's economy today is larger than it has ever been. Real GDP per capita and personal income per capita are now at their highest levels. Personal income per capita reached \$45,430 in 2017, representing a 14 percent increase since the Great Recession in 2009 (in 2017 dollars). The resources to sustain higher state revenues are available, if policymakers choose to tap them.

The fundamental reason for declining revenues is that Michigan's tax effort has declined. Tax effort is the percentage of the economy, or personal income, devoted to taxes. State revenues are down because policymakers have chosen to cut tax rates, create tax breaks, and rely on revenue sources that do not grow with the economy.

The fundamental reason for declining revenues is that Michigan's tax effort has declined.

Figure 8 shows the long-term decline in tax effort in Michigan and states nationwide. While Michigan's tax effort surpassed the national average for most years before 2002, it has since fallen substantially below the (simultaneously declining) tax effort nationally. The sharpest drop in Michigan's tax effort has come since 2010.

Figure 8. State and Local Taxes as a Percentage of Personal Income, U.S. Average and Michigan

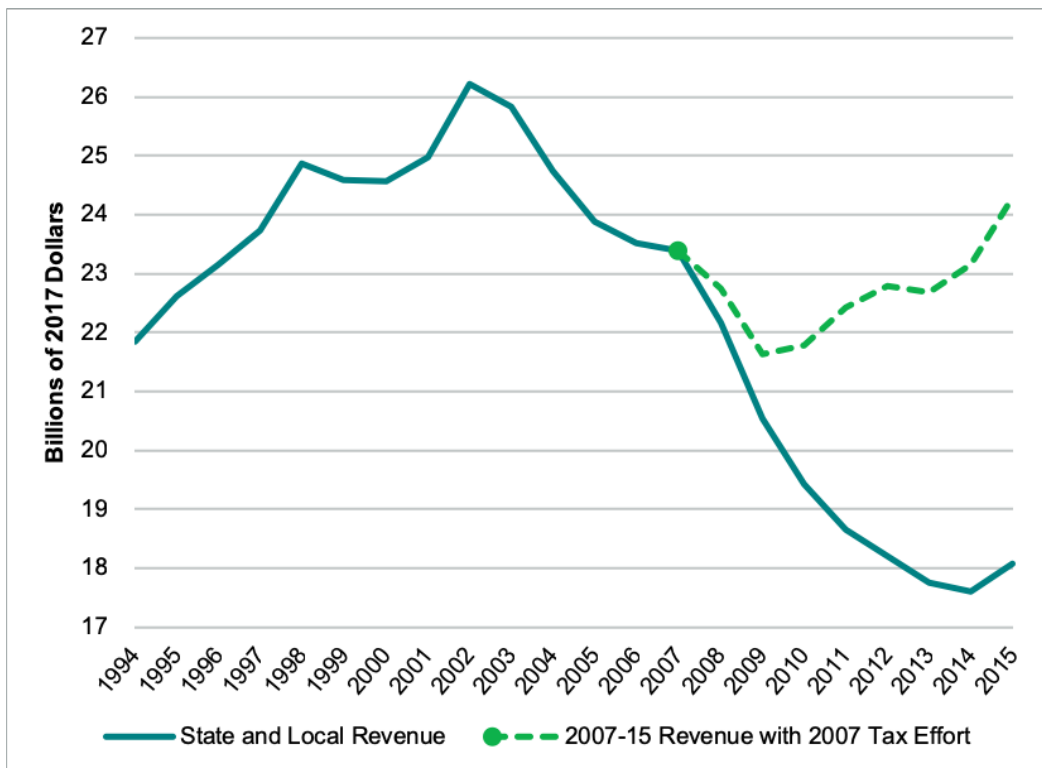


Source: Prof. Charles Ballard's analysis of U.S. Census of Governments and U.S. Bureau of Economic Analysis data.

If Michigan devoted the same fraction of its economy to state and local taxes today as in 1972, it would generate an additional \$15 billion in tax revenues per year. That represents 76 percent of total K-12 education revenues from federal, state, and local sources in 2015. If Michigan's tax effort only increased to the 2015 national average, it would generate an additional \$3 billion in revenues per year, an increase of more than 15 percent above 2015 total revenue. To put this in perspective, if Michigan's tax effort increased to the national average, the additional \$3 billion in revenue would be sufficient to nearly restore real school funding to the level that prevailed in 1994.

While Figure 8 displays tax effort for all state and local government services, Figure 9 shows the consequences of Michigan's declining tax effort for K-12 state and local education revenues. The solid line displays the actual revenue trend in 2017 dollars. The dashed line shows a hypothetical revenue trend for the years 2007 to 2015 if Michigan's education tax effort had remained at its 2007 level. If we devoted the same share of personal income to K-12 education in 2015 as in 2007, the state would have raised an additional \$6.2 billion.

Figure 9. Total State and Local Education Revenue, with and without Post-2007 Decline in Tax Effort

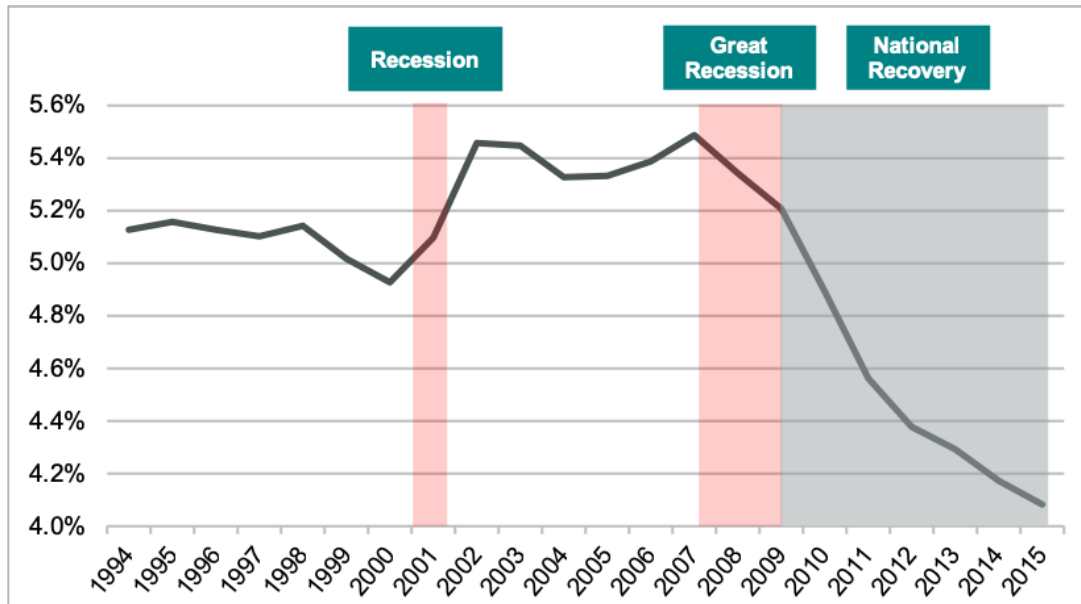


Source: National Center for Education Statistics, F-33 Common Core of Data; Michigan Fall Head Count; and U.S. Bureau of Economic Analysis.

Figure 10 traces shifts in Michigan’s state and local education tax effort over time. The figure also depicts the two national recessions in 2001 and 2008-09. State and local tax effort traditionally increase during recessions, because income tends to fall proportionately more than revenues.

Between 1994 and 2000, economic expansion and roughly stable tax effort generated rising real revenue for Michigan’s schools (as shown in Figure 9). Tax effort increased during the 2001 recession, and fluctuated slightly thereafter until 2007. Since 2007, however, Michigan’s education tax effort has dropped sharply, not only during the Great Recession but also over the last decade as the state and national economies have rebounded. Michigan’s real personal income today is higher than it has ever been. Yet because of a historic drop in tax effort, the state’s education funding has continued to decline over the last decade.

Figure 10. Education Tax Effort



Source: National Center for Education Statistics, F-33 Common Core of Data; U.S. Bureau of Economic Analysis.

If the political will is present, Michigan could certainly provide better financial support for children’s educational opportunities with a statewide tax effort that is typical of other states nationwide. Indeed, one major reason for citizens and policymakers to embrace adequacy standards is precisely to protect children’s education from the political whims of the day.

Policy Choices

The collapse of K-12 funding has forced tough budgetary choices on nearly all Michigan schools. These choices are difficult because educators have been forced to cut services that they know are beneficial for kids and that parents want. While districts can raise additional revenue for capital facilities, they cannot offset the state’s neglect by raising local revenues to support instruction or other operational costs.

Proposal A placed state policymakers in control of operational funding for Michigan schools. This shift in control is not inherently good or bad. The relevant question is how well policymakers have used their authority to shape a high-performance system of school finance. In giving up the benefits of local control, how well has the state done in overcoming the intrinsic problems with local funding to establish a fair and adequate system of K-12 school finance?

For roughly eight years after its passage, Proposal A brought improvements to basic funding adequacy in Michigan, while falling short on adjusting revenues to match key additional costs differentials faced by local districts and charter schools. Over the last 10 to 15 years, however, the adequacy of Michigan’s school funding has seriously eroded.

When the Proposal A system was launched, state policymakers recognized that important school finance problems had not yet been resolved. Special education funding remained problematic, and they left school facility funding completely unaddressed. These issues are discussed in the next two sections.

SECTION 5

Financing Special Education Services

The U.S. Department of Education concluded in July 2018 that Michigan is the only state to be serving special education students so poorly that it needs federal intervention to ensure it is meeting the requirements of federal disability law.¹⁷ This situation cannot please any Michigan citizen. Sustained, statewide improvement will require, among other things, changes in the way Michigan finances special education services.

Federal law grants students with disabilities the right to a free and appropriate education in K-12 public schools. Because special education students typically cost more to educate than regular education students, special education funding arrangements are among the most important features of any state's school-funding system. There is growing recognition that Michigan's special education funding ranks among the state's most pressing school finance problems. Fortunately, these are problems that can be addressed with suitable policy changes.

Michigan's funding of special education is highly inequitable and inadequate. State (and federal) lawmakers have shifted most of the funding responsibility to the local and county levels. Yet Proposal A precludes local districts from levying taxes to cover additional special education costs.

Intermediate school districts (ISDs), which comprise one or more counties, meanwhile, have very unequal ability to raise revenues for special education services. Moreover, because revenues from other levels of government fall short of special education costs, Michigan districts on average devote over \$500 per student of regular education funds to pay for special education services. In some districts this diversion of funds exceeds \$1,000 per pupil. Consequently, the state's flawed special education funding impacts special education and regular education students alike.

Some observers mistakenly believe that Michigan schools have a financial incentive to over-identify students with disabilities. In fact, under Michigan's funding arrangements, students with disabilities almost always represent a financial loss to districts and charter schools, and the more serious a student's disabilities, the larger the financial loss. For this reason, Michigan's funding arrangements create strong financial incentives for schools to scrimp on needed student services. Michigan has strongly endorsed school choice policies, but the state's special education funding gives no school the incentive to compete for students with disabilities. This too is inequitable.

Under Michigan's funding arrangements, students with disabilities almost always represent a financial loss to districts and charter schools, and the more serious a student's disabilities, the larger the financial loss.

¹⁷ U.S. Department of Education, 2018 Determination Letters on State Implementation of IDEA, July 24, 2018.

Michigan's arrangements for funding special education are complex and poorly understood, even among observers familiar with other aspects of the state's school finance system. This section briefly summarizes how the state funds services for students with disabilities, highlights key consequences of these arrangements, and points to possible policy solutions.

Legal Context

The landmark federal Individuals with Disabilities Education Act (IDEA) of 1975 entitled children with disabilities, from birth to age 21, to early intervention services and a “free and appropriate education” that is tailored to meet their individual needs in the “least restrictive environment.” Under IDEA, services for each student with disabilities are guided by an individual education plan (IEP) that is established by parents and a multidisciplinary team of educators and professionals. About 13 percent of U.S. and Michigan students have disabilities. Disabilities vary greatly in severity (e.g., learning disabilities, speech impairment, blindness, autism, multiple impairments) and variously affect the share of the school day that students with disabilities attend regular classrooms. The cost of required services also varies by disability type.

IDEA requires states to establish eligibility rules for special education services. Based on a student's disabilities, the Michigan Administrative Rules for Special Education (MARSE) define services a student is eligible to receive. They set guidelines for service levels, caseloads, class size, and other provisions. Michigan is alone among states in entitling persons with disabilities to services until age 26. MARSE also requires each intermediate school district to establish a plan detailing how services are provided within the ISD. ISDs differ in the assignment of responsibilities for service provision between the ISD and its constituent local districts, but IDEA requires that the services must be provided regardless of cost.

How Are Special Education Services Funded?

When passed, IDEA established a goal for the federal government to pay for 40 percent of special education costs, but Congress has never authorized funding at that level. The federal government provides funding to cover slightly over 10 percent of the costs of special education programs through grants and Medicaid reimbursement. Each state designs its own system for funding the remaining special education costs. These funding arrangements vary considerably by state.¹⁸

Most state funding systems assign special education students additional funding weight. For example, in a fully state-funded system, if the costs to serve a special education student were 60 percent higher than the costs of a typical regular education student, they would receive an additional weight of 0.6, or total pupil weight of 1.6, in the system. Most states that use pupil-weighting formulas also establish multiple weights for different disability types based on their severity and cost. The next most common state financing approach

¹⁸ Education Commission of the States, 50-State Comparison: State Funding for Students with Disabilities, October 1, 2015. Available at <https://www.ecs.org/state-funding-for-students-with-disabilities-db/>

allocates special education funds to local districts as lump-sum grants based on students' disability classification.

Although pupil counts in both of these state aid approaches can be based on districts' special education enrollments, both are also compatible with so-called "census systems" in which dedicated special education funding is based on districts' total student enrollment. Census systems are thought to eliminate local incentives to over-identify students with disabilities. They implicitly presume that the incidence of student disabilities does not vary dramatically among local districts.

Michigan is one of five states that uses a percentage reimbursement system to distribute state special education revenue. The state reimburses local districts and charter schools for a portion of their special education costs. Michigan reimburses only 28.6 percent of local spending on mandated special education services, plus 70.4 percent of special education transportation costs. Consequently, after federal and state funding, the remaining 60 percent of special education costs must be covered either by local districts and charter schools or by their intermediate school districts.

Michigan's 28.6 percent reimbursement rate is the lowest among states using the reimbursement approach. Wyoming, by contrast, reimburses 100 percent of special education costs. Michigan's reimbursement rates were established through litigation between the state and school districts in the *Durant* cases during the 1990s and 2000s.

Michigan's special education reimbursement, however, is not provided on top of special education students' foundation allowances. This is because the state counts its contribution to the foundation grant of special education students toward its obligation of 28.6 percent of special education costs. The state pays for the entire foundation allowance for each full-time equivalent special education student. Districts therefore receive additional special education funding only if the 28.6 percent reimbursement (and 70 percent for transportation) exceeds a student's foundation allowance.

Since Proposal A's passage in 1994, Michigan's local school districts have been prohibited from levying additional property tax millages to fund school operations. So revenue to cover over 60 percent of special education service costs must come either from an earmarked ISD special education property tax millage, which has a statutory limit, or from local districts' regular education budget.

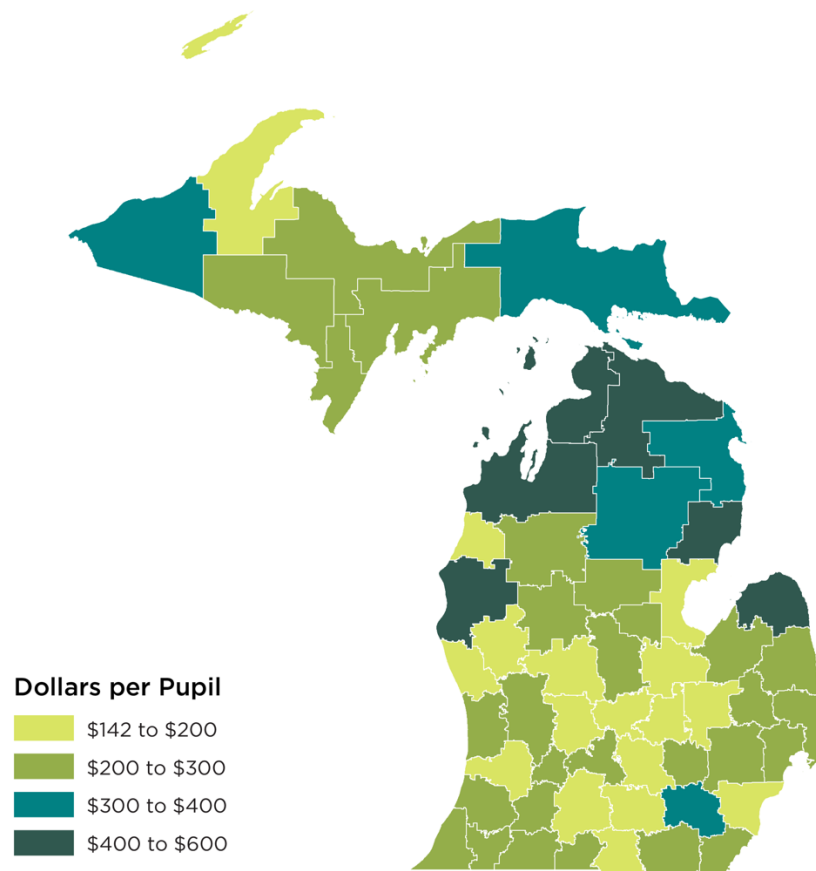
Why Michigan's Special Education Funding Is Inequitable

Michigan's special education funding arrangements create inequities across districts for three basic reasons.

First, ISDs vary dramatically in their ability to pay for special education services, due to differences in their property tax bases. ISD millages are applied to the taxable value of all local districts in the ISD. Per-pupil taxable value ranges from \$144,302 in Genesee ISD to over \$600,000 in Charlevoix-Emmet ISD. Genesee, then, would have to levy over four times the millage rate in Charlevoix-Emmet in order to generate the same per-pupil revenue.

Figure 11 displays the per-pupil revenue that would be generated by a one-mill special education tax.

Figure 11. Per-Pupil Revenue Generated by a One-Mill ISD Tax, 2018



Source: Michigan Department of Education, State Aid Status Reports.

ISDs clearly differ greatly in their revenue-raising capacity. A one-mill special education levy would raise anywhere from \$142 per pupil, in the lowest property wealth ISD, to \$600 in the highest. Several of the ISDs with the highest tax bases are in areas with substantial nonhomestead taxable value (e.g., vacation homes) and relatively few resident students. The ISDs with the lowest property wealth are found in both metropolitan and rural areas.

The state has a modest tax base equalization program (Section 56 funding) to offset such ISD tax base inequities. While tax base equalization is a reasonable policy to address these inequities, state funding for Michigan's program is so meager that only 13 ISDs qualify for state aid, with 60 percent of the funds going to a single ISD. Section 56 sets the guaranteed base at \$180,000 in taxable value per pupil. ISDs with higher tax bases receive no state subsidy. The average per-pupil taxable value for Michigan ISDs is over \$250,000.

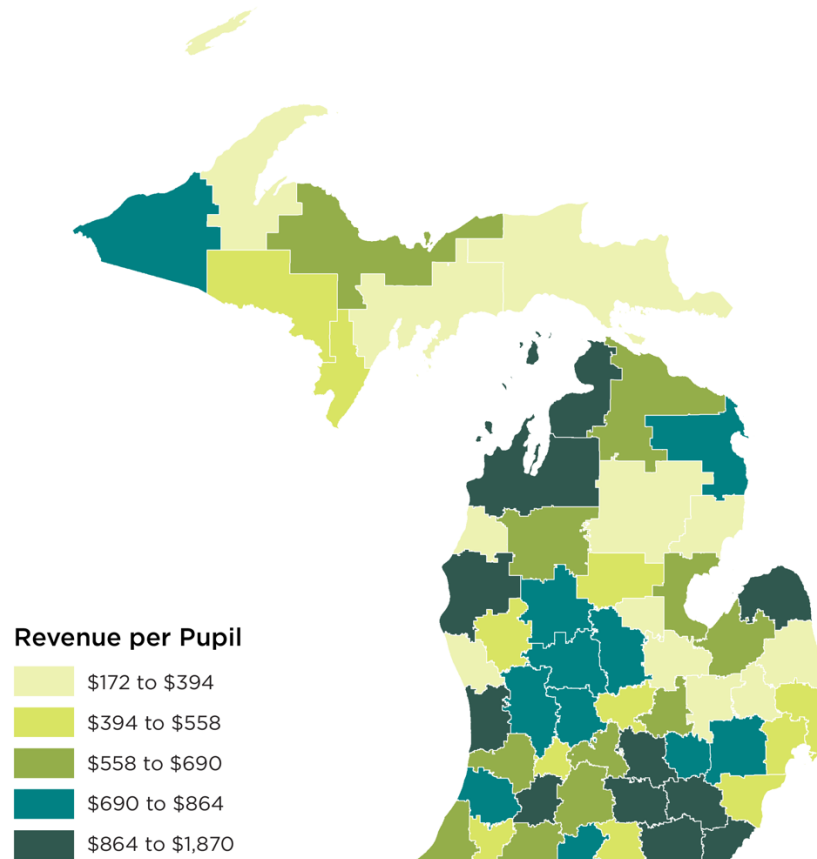
Second, ISD special education millage rates are capped by the state, but this cap varies substantially and arbitrarily across ISDs. Regardless of local voters' willingness to pay, the cap is set at 1.75 times an ISD's special education millage rate in 1993. All ISDs currently levy a special education millage, yet the rates vary from .6329 in northern Michigan's C.O.O.R. ISD to Jackson ISD's 10-fold higher 6.2764 mills.

Given variations in tax bases and millage rates, Michigan ISDs generate hugely different levels of special education revenue, ranging in 2018 from \$172 per pupil in Lapeer ISD to

\$1,870 per pupil in Huron ISD, less than 50 miles away. Figure 12 shows the geographical distribution of ISD quintiles defined by per-pupil special education revenue. The map shows both high- and low-funding special education ISDs dispersed throughout the state.

To take one example, Wayne Regional Education Service Agency's 3.36 millage rate is essentially at its cap. But when this rate is applied to the county's relatively low tax base, the \$480 per-pupil revenue generated falls in the bottom third of ISDs.

Figure 12. Per-Pupil ISD Special Education Revenues, 2018



Source: Michigan Department of Education, State Aid Status Report.

Third, local districts vary in the share of students who require special education services and in the scope of services needed. The incidence of some disabilities is higher among children from low-income families. In addition, the share of students with disabilities tends to be much lower in charter schools. This leads to higher rates of special-needs students in traditional public schools in districts where high shares of student attend charters. Take, for example, Detroit, where over half of all students participate in school choice. In the Detroit Public School Community District, the proportion of students requiring special education services is approximately 18 percent. For charter schools located in the same area, that proportion is nine percent. Because most special education students are educated in regular classrooms part of the day, full-time equivalent special education rates are lower, but also quite different between district and charter schools. On average, special education students represent 3.4 percent of the state's FTE student population, but only 1.2 percent in charter

schools. Charter schools also tend to serve students with less serious and costly disabilities, leaving many of the students with more costly disabilities concentrated in district schools.

Given these equity problems with Michigan's special education funding, it is not surprising that funding for students with disabilities is also inadequate. As we explain next, however, the state's special education funding also introduces inequity and inadequacy to the funding for regular students.

Encroachment

Encroachment consists of the dollars a district must take from its regular education funds to pay for special education services. Most Michigan districts experience encroachment. The challenge is particularly severe, however, in ISDs with low property values and low millage-rate caps, and in districts with high rates of students with disabilities. Consequently, some districts devote over \$1,200 per pupil—nearly 15 percent of foundation grant funding—to meet the needs of special education students.

Michigan's problem of special education encroachment has recently received wider attention. Lieutenant Governor Brian Calley's 2017 Special Education Funding Subcommittee report highlighted the problem and noted, "It is clear that Michigan must do better and should strive to improve special education funding systems."¹⁹ Michigan State University's Dr. Sarah Reckhow and the Citizen Research Council's Craig Thiel have also raised concern about the adverse effect of encroachment on district finances.²⁰ Likewise, the Coalition for the Future of Detroit Schoolchildren has documented the substantial role encroachment plays in the precarious financial status of the Detroit Public School Community District.

We estimate that the total encroachment for Michigan schools in the 2014–15 academic year was roughly \$800 million, or about \$534 per general education pupil.²¹ This amounts to approximately 7.5 percent of the state's basic foundation grant.

Encroachment rates differ substantially across local districts within ISDs, but here we consider the encroachment levels for all constituent local districts in an ISD, aggregated to the ISD level. Among Michigan's 56 ISDs, only Huron ISD does not experience encroachment overall. Among other ISDs, encroachment per general education student ranges from \$104 to over \$1,200 per general education pupil.

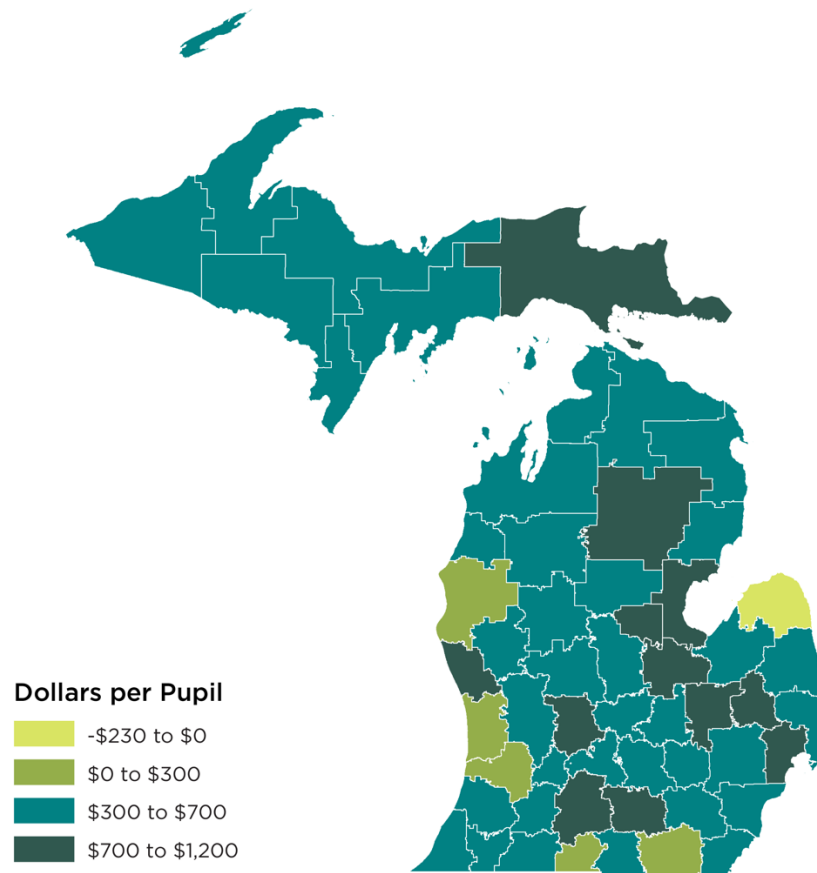
¹⁹ Special Education Finance Subcommittee Report, November 2017, p. 3. Available at https://www.michigan.gov/documents/calley/Special_Education_Finance_Report_-_final_2017_606751_7.pdf.

²⁰ Craig Thiel and Sarah Reckhow, "Special Education Funding Falls More Heavily on Urban School Districts," *Bridge Magazine*, December 21, 2017. Available at <https://www.bridgemi.com/guest-commentary/special-education-funding-falls-more-heavily-urban-school-district>.

²¹ We relied on data in the audited financial statements of all Michigan ISDs as reported to the Michigan Department of Education and other MDE financial data. We defined encroachment as special education expenditures minus revenues for special education services. Expenditures included those for both instruction and transportation as reported to the state. Revenues included state foundation and special education categorical payments plus ISD special education revenues and reimbursements through the Medicaid program. We are indebted to Steven Ezikian, Deputy Superintendent for Wayne RESA, for sharing data used in these estimates.

Figure 13 displays encroachment levels for the state's ISDs. High encroachment levels are not constrained to any geographic region. ISDs with more than \$700 of encroachment per pupil include rural and urban areas. In these ISDs, general education students are effectively losing 10 percent or more of their foundation grant revenue to cover the costs of special education services.

Figure 13. Encroachment per General Education Student by ISD, 2014–15



Source: Michigan Department of Education, State Aid Status Report.

While we have focused on patterns of encroachment across ISDs, encroachment rates also vary greatly across local districts within ISDs. Consider, for example, Wayne County (Wayne Regional Education Service Agency) which is the state's largest-enrollment ISD, comprising the most local districts (33) and the most charter schools (108). Wayne RESA also represents a highly diverse set of local districts.

Among Wayne County's local districts, encroachment per general education pupil in 2015 varied from a low of \$374 in Dearborn Heights to a high of \$1,076 in Detroit Public Schools. Total encroachment in Detroit Public Schools was nearly \$50 million, which understandably represents a major burden for the financially struggling district. Yet the second highest encroachment rate (\$1,039) was in affluent, nearby Grosse Pointe Public Schools. Encroachment in Plymouth-Canton Community Schools and Dearborn Public Schools was \$730 and \$743, respectively.

Most of Wayne County’s charter schools had much lower encroachment than local districts. The unweighted average encroachment was \$308 among the county’s charter schools and \$704 among its local districts. Nevertheless, the county’s highest encroachment rate (\$1,082) occurred in a 40-student charter school. Of the county’s 108 charters, 82 had lower encroachment than the lowest-encroachment school district (Dearborn Heights).

A Serious Policy Failure

No one defends Michigan’s current approach to funding special education. The state controls funding for school operations in Michigan, yet state policymakers have shirked their responsibility to design a credible system of special education finance. To an extent unmatched in nearly any other state, Michigan has shifted this responsibility to local districts, which it prohibits from raising additional tax revenue, or to ISDs with very unequal and constrained revenue-raising ability.

Michigan has shifted (special education funding) responsibility to local districts, which it prohibits from raising additional tax revenue, or to ISDs with very unequal and constrained revenue-raising ability.

Michigan’s funding arrangements for special education clearly diminish the equity and adequacy of funding for both special education and regular education students. Local districts and charter schools face strong financial incentives to under-identify their students’ special education service needs.²² This incentive intensifies as overall funding falls relative to adequate levels and school leaders struggle to preserve basic services. Nevertheless, in order to faithfully meet students’ special education needs, most local districts and charter schools are forced to reallocate substantial funding intended for regular education services.

As we have shown, these financial challenges vary substantially across Michigan’s regions and communities. With the passage of Proposal A, Michigan lawmakers sought to weaken, if not break, the ties between where students live and the funding they receive. By inadequately funding special education, however, Michigan has reintroduced substantial and durable inequities based on where students live.

Toward a Better Approach

We offer specific recommendations for special education finance in [section 9](#). Here we set out a few framing observations.

The challenge of funding special education in Michigan and in other states could be immediately eased if the federal government paid a larger share of the costs for services mandated under federal law. Michigan citizens should support a greater federal funding role as beneficial for special-needs and regular education students alike.

²² For example, recent audits of Detroit’s special education services suggest that many students who need special education services are not currently identified. Jennifer Chambers, “Detroit Schools Target Special Ed Failures,” *Detroit News*, July 10, 2018.

State policymakers could consider steps to reduce the cost of required special education services. Michigan, for example, could lower the age limit for special education benefits from 26 to 21. This is certainly a difficult option. On the other hand, research suggests that redirecting greater state investment to early-intervention special-needs programs like Early On Michigan could be highly cost-effective in reducing long-run special education costs. The National Early Intervention Longitudinal Survey found that 42 percent of children who participated in IDEA's early intervention program (Part C of IDEA) did not need special education services later in life.²³

Apart from efforts to increase federal funding or lower special education costs, state policymakers will necessarily have to step up to the responsibility of improving the state's special education finance.

Whatever form a new funding system takes, special education students should be entitled to their full foundation allowance, just like regular education students, plus additional funding to cover the extra costs of special education services. Beyond this, policymakers must decide on the distribution of the remaining special education funding responsibility between the state and ISDs. (ISDs might continue to assume a large role in the delivery of special education services, even if they are funded entirely by the state.)

Leaving a portion of special education funding as an ISD responsibility would lower the need for additional state revenues. If it were to hold any promise of improving current conditions, however, this option would require a much stronger state commitment to tax-base-equalizing aid for ISD special education millages than the existing Section 56 program, funding for which has recently been cut by about \$10 million. It would also require equalization, if not removal, of caps on ISD special education millages.

Whatever form a new funding system takes, special education students should be entitled to their full foundation allowance, just like regular education students, plus additional funding to cover the extra costs of special education services.

It is almost certainly the case, however, that fair and effective solutions to Michigan's special education funding, as in other states, will have to rely on an increased financial commitment from the state. There are options for the design of the funding formula, including some that fairly and adequately fund special education services without creating incentives for districts and charter schools to over-identify students with disabilities or neglect efforts to provide these services as efficiently as possible. We advance our suggestion in [section 9](#).

²³ Kathleen Hebbeler, Donna Spiker, Don Bailey, Anita Scarborough, Sangeeta Mallik, Rune Simeonsson, Marnie Singer, and Lauren Nelson, *Early Intervention for Infants and Toddlers with Disabilities and Their Families: Participants, Services, and Outcomes. Final Report of the National Early Intervention Longitudinal Study (NEILS)*, January 2007. Available at https://www.sri.com/sites/default/files/publications/neils_finalreport_200702.pdf.

SECTION 6

School Facility Finance

The sweeping policy changes associated with Proposal A did not include any elements directed to financing school facilities. While facility finance was discussed during the negotiations leading up to Proposal A, a solution was never put into statute. Consequently, funding for school facilities and capital equipment is unfinished business of Proposal A. Michigan's financing system continues to pose major equity and adequacy problems, limiting educational opportunities for many children.

The way Michigan finances school infrastructure has remained largely unchanged since 1980, when a program that partially equalized revenue between districts was abandoned. To this day, school construction and infrastructure improvements remain a local responsibility, funded by local property taxes. While Proposal A created a centralized system of finance for school operations, facility finance is entirely decentralized. Inequalities in the property wealth of local districts are directly translated into inequalities in school facilities.

States have various policies to promote greater equity and adequacy in school facilities. Michigan is one of only 14 states that provide no state aid for capital infrastructure.²⁴ Duncombe and Wang ranked the equity of Michigan's capital funding in the bottom fifth of U.S. states.²⁵

If one set out to design a system of funding in which the vast differences across Michigan's local communities in the size and quality of students' homes were reproduced in the schools children attend, one could scarcely do better than our current system of school facility finance.

States have various policies to promote equity and adequacy in school facilities. Michigan is one of only 14 states that provide no state aid for capital infrastructure.

The Importance of School Infrastructure

The quality of schools' infrastructure influences many facets of schooling. Inadequate facilities prevent students from attaining their potential. School facilities are necessary to

- Support educational programming;
- Maintain the health and well-being of students and staff;
- Sustain community development and engagement.

²⁴ Jeffrey M. Vincent, "State Funding for K-12 School Facilities: A Survey of the States," Center for Cities and Schools, University of California, Berkeley, June 2014. Available at http://citiesandschools.berkeley.edu/reports/Vincent_2014_State_K12%20fac_funding_final.pdf.

²⁵ William D. Duncombe and Wen Wang, "School Facilities Funding and Capital-Outlay Distribution in the States," *Journal of Education Finance* 34, no. 3 (2009): 324-50.

Facilities affect the ability of teachers to teach and students to learn. Schools must have sufficient quantity and quality of physical space to accommodate students and staff. Parents expect specialized infrastructure such as science and computer labs, libraries and media centers, physical education equipment, and art studios. Capital funding also pays for a wide range of technology used to assist instruction as well as maintain security.

School capital facilities matter greatly for the type of learning experiences that students have access to. The opportunity to work with modern technologies in schools is becoming ever more important to prepare students for emerging high-skill employment opportunities. Today, students in relatively affluent Michigan school districts learn to use computer-controlled machine tools, computer-aided drafting and graphic art technology, state-of-the-art television studio equipment, and more. Learning opportunities such as these can stimulate students' interest, imagination, and career aspirations, but they are rarely available in less-affluent communities.

School buildings also affect the health and well-being of students and staff. Research has identified a range of effects of school buildings' ventilation, acoustics, lighting, and thermal controls on students and staff. Schools with poor ventilation can cause respiratory illness and declines in alertness and attendance.²⁶ Classroom acoustics affect students' attention and learning.²⁷ Poor lighting in schools affects how well students sleep at night and therefore how ready they are to learn during the day.²⁸ A recent study found that uncomfortably hot classrooms in schools without air conditioning had a strong negative effect on student learning.²⁹ The 21st Century School Fund found that poor conditions in facilities were related to truancy.³⁰

Teachers represent the most important resource for any school. Teacher turnover is a major problem for districts, especially in urban and rural schools serving low-income children. Several factors influence teachers' decision to leave their jobs, but studies have highlighted the role of facilities in these decisions.³¹ It is difficult to expect educators to spend their working lives using outdated equipment in dilapidated structures when far superior work environments are available in other jobs or more affluent school districts.

School buildings also matter for neighborhood and community development. High-quality facilities attract households to a community, increasing demand for the housing stock and raising home values.³² Well-designed and well-used schools also represent critical resources

²⁶ W. J. Fisk, "The Ventilation Problem in Schools: Literature Review," *Indoor Air* 27, no. 6 (2017): 1039–51.

²⁷ Maria Klatte, Thomas Lachmann, and Markus Meis, "Effects of Noise and Reverberation on Speech Perception and Listening Comprehension of Children and Adults in a Classroom-Like Setting," *Noise and Health* 12, no. 49 (2010): 270.

²⁸ Mariana G. Figueiro and Mark S. Rea, "Lack of Short-Wavelength Light during the School Day Delays Dim Light Melatonin Onset (DLMO) in Middle School Students," *Neuro Endocrinology Letters* 31, no. 1 (2010): 92.

²⁹ Joshua Goodman, Michael Hurwitz, Jisung Park, and Jonathan Smith, "Heat and Learning," National Bureau of Economic Research Working Paper No. 24639, May 2018.

³⁰ Mary Filardo, "State of Our Schools: America's K-12 Facilities 2016," 21st Century School Fund. Available at <https://files.eric.ed.gov/fulltext/ED581630.pdf>.

³¹ Jack Buckley, Mark Schneider, and Yi Shang, "The Effects of School Facility Quality on Teacher Retention in Urban School Districts," National Clearinghouse for Educational Facilities, February 2004. Available at <http://www.ncef.org/pubs/teacherretention.pdf>.

³² Stephanie Rigg Cellini, Fernando Ferreira, and Jesse Rothstein, "The Value of School Facility Investments: Evidence from a Dynamic Regression Discontinuity Design," *Quarterly Journal of Economics* 125, no. 1 (2010): 215–61.

for community activities: as sites for recreation, the arts, group meetings, provision of public health services, and voting. In many of Michigan's rural districts, school buildings are a hub for community activities where few alternatives exist. Unfortunately, these potential benefits of school facilities are presently realized to a greater extent in relatively affluent communities than in less affluent areas, where the need for such resources is greatest.

How Districts Finance School Infrastructure

Michigan school districts currently pay for capital projects in three ways: long-term bonds, sinking funds, and cash reserves. Each method is regulated by state guidelines.

Long-Term Bonds

Bonds are the most common way for school districts to generate funds for large-scale capital improvements. By selling bonds, districts can acquire resources up front to pay for infrastructure projects. The bonds are repaid with interest over a predetermined number of years with revenue from a dedicated millage levied on local property. Capital projects and millages must be approved by a district's voters.

The millage rate needed to finance a capital project depends on a district's taxable property value. Districts with lots of property wealth can generate revenue at a lower millage than property-poor districts.

As we noted in [section 2](#), in Michigan, property taxes are levied on each parcel's taxable value, which is targeted to be half of the property's market value. A mill is equivalent to one dollar of tax per \$1,000 of a property's taxable value. For example, with a five-mill levy on a property with market value of \$200,000 and taxable value of \$100,000, a property owner would pay \$500 per year in taxes.³³

While the state does not pay for school facilities, it does help lower local districts' borrowing costs. The School Bond Qualification and Loan program (SBQL), established in 1955, allows districts to borrow against the state's credit rating to reduce interest payments on debt. About 80 percent (\$12.9 billion out of a total of \$16.2 billion) of long-term bonds issued by districts go through the SBQL program.

In order to use the state's credit rating, a district's capital project must receive approval from the SBQL program. This qualification process requires districts to raise between seven and 13 mills until their debt to the state is paid. Districts do not face these limits on bonds that do not go through the SBQL program.

The school bond loan fund (SBLF) once allowed districts to secure state loans to extend repayment of their bonds over a longer period, and thereby reduce the number of mills they had to levy. PA 437 of 2012 effectively ended the SBLF for the foreseeable future and set tighter restrictions on district capital bonds.

Whether or not a capital bond goes through the SBQL process, there are strict limits on the use of long-term bond revenue. Bonds can pay for capital improvements such as

³³ Tax payment = mills × (taxable value / 1,000). In this example, \$500 = 5 (\$100,000 / 1,000).

construction, remodeling, site acquisition, and durable goods such as buses, technology, furnishings, and equipment, but cannot fund maintenance or operation expenses.

In 2017, 415 of Michigan's 537 school districts (77 percent) had outstanding debt for capital projects, totaling over \$16.2 billion. The average rate of capital debt mills levied by districts was 4.59, the highest being 16.15.³⁴

Sinking Funds

Sinking funds allow districts to use revenue generated through local millages to pay for capital improvements on a pay-as-you-go basis. Instead of receiving a sum up front to be repaid over a period (as with long-term bonds), sinking fund millages provide revenue annually over a specified number of years that districts can use for capital improvements. Compared to long-term bonds, sinking funds are cheaper because they avoid interest payments. Because the funds are generated incrementally over time, however, this method of finance is typically not suitable for major capital projects, such as school construction. Like long-term bonds, sinking fund projects and millage rates must be approved by a district's voters.

The use of sinking funds is strictly regulated by state guidelines. Public Act 319 of 2016 expanded the possible uses of sinking funds, while simultaneously reducing the permissible number of sinking fund mills districts can propose to voters from five to three, and reducing the maximum number of years from 20 to 10. Sinking fund revenues can be used to purchase real estate, construct or repair school buildings, purchase technology and other durable equipment, or retire bonded debt. Sinking funds are frequently used for building renovations or technology upgrades.

Cash Reserves

Finally, districts can use up to 20 percent of their foundation allowance revenue to pay for infrastructure needs. While districts sometimes divert cash reserves from operational funds to capital improvements, few are in a position to do so. Because funding for school operations in Michigan has been so tight for over a decade, districts typically seek to pay for capital infrastructure through bonds or sinking funds to preserve revenue available for instruction.

Charter Schools

Unlike traditional public schools, charter schools do not have geographic boundaries or taxing authority, so they cannot levy millages for long-term bonds or sinking funds. Charter schools, therefore, typically rent their school buildings with foundation allowance revenue. Many Michigan charter schools lease their facilities from a private education management organization with sufficient resources or credit to purchase or build school buildings.

³⁴ Michigan Department of Treasury, Bureau of State and Authority Finance, School Bond Qualification and Loan Program, Annual Report, 2017. Available at https://www.michigan.gov/documents/treasury/2017_SBQLP_Annual_Report_Final_617595_7.pdf.

Michigan's School Facility Finance Problems

By relying solely on local property taxation, Michigan's school facility finance creates unequal opportunities for students and unequal burdens for taxpayers. And it fails to ensure adequate facilities for all children.

We illustrate the basic problems in Table 5, which portrays bond financing arrangements needed to build the same 400-student elementary school in five similar-size Michigan districts. In each district, we assume the \$20 million cost will be repaid over 20 years.³⁵ Yet the cost to local taxpayers varies dramatically depending on local property values.

By relying solely on local property taxation, Michigan's school facility finance creates unequal opportunities for students and unequal burdens for taxpayers.

Table 5. Capital Millage Costs of a New Elementary School in Selected Michigan Districts

District	County	Enrollment	Taxable value per pupil	Total taxable value	Millage ^a rate needed	Tax on a \$200,000 property
Carrolton	Saginaw	2,306	\$31,252	\$72,100,000	22.27	\$2,226
Imlay	Lapeer	2,078	\$162,668	\$338,000,000	4.75	\$474
Escanaba	Delta	2,397	\$212,140	\$509,000,000	3.16	\$315
Ludington	Mason	2,186	\$499,551	\$1,090,000,000	1.47	\$147

Source: Michigan Department of Education Bulletin 1014.

^a Calculated using a five percent interest rate.

With over a million dollars in taxable value per pupil, Ludington could purchase the new school with a levy of only 1.47 mills on local property, or an annual property tax payment of \$147 for the owner of a \$200,000 property. To build the same school, Carrolton would have to assess 22.27 mills, at an annual cost of \$2,226 for the owner of a \$200,000 property. In fact, residents of Carrolton could not build this school for its students, because the required millage exceeds the state limit of 13 mills.

The unequal opportunities for students and unequal taxpayer burdens implied by Table 5 have been documented in research encompassing all Michigan school districts. Arsen and Davis estimated the value of school capital facilities in every Michigan district.³⁶ They found a strong positive correlation between a district's taxable value per pupil and the value of its school capital stock. On average, the per-pupil capital stock in the top quintile of districts (ranked by taxable value per pupil) was double the capital stock in the lowest quintile. Yet,

³⁵ In the United States, elementary schools cost an average of \$43,693 per pupil. (School Planning and Management, *20th Annual School Construction Report*, 2014, February 1, 2015. Available at <https://webspm.com/research/2015/02/annual-school-construction-report.aspx>)

³⁶ David Arsen and Thomas Davis, "Taj Mahals or Decaying Shacks: Patterns in Local School Capital Stock and Unmet Capital Need," *Peabody Journal of Education* 81, no. 4 (2006): 1-22.

despite having school facilities worth half as much, the lowest-quintile districts taxed themselves at nearly triple the millage rate of the richest quintile.

A joint project of the Citizens Research Council and the Education Policy Center at Michigan State University combined estimates of district capital stock with the investment that would be necessary to bring facilities up to various standards.³⁷ The total value of Michigan's school capital facilities in 2004 was \$32.2 billion, or roughly 2.3 times the total operating expenditures of the state's schools that year. On average, the education of every Michigan student was supported by about \$20,000 in educational facilities. The research clearly showed why state policy is needed. Even if local residents were willing to tax themselves at very high levels, the millage rates required to bring facilities in districts in the bottom per-pupil taxable-value quintile up to an adequate standard would surpass the state's cap on millage rates.

One can learn a great deal about a community by walking through a school building. These places in which children and educators spend a great deal of time influence how people interact and feel. The setting can feel comfortable and uplifting or drab and depressing. Some schools announce opportunity and promise—with atrium ceilings, Carnegie Hall auditoriums, Olympic swimming pools, spectacular athletic training and performance facilities, welcoming spaces for interaction, attractive grounds, and more. Other schools tell children that adults don't care much about their comfort and opportunities.

It doesn't have to be this way.

Policy Options

Michigan has established high performance standards for students and schools. The state has the responsibility to ensure that they have adequate resources to meet those standards. Because these resources include adequate facilities, policymakers have an obligation to fix Michigan's broken system of capital finance.

Fortunately, states across the nation have developed a wide variety of policies to overcome these problems. We can learn from other states to implement policies that ensure adequate school facilities for every Michigan student.

Any solution must overcome inequalities for students and taxpayers inherent to local property taxation while also ensuring that all students have access to adequate facilities.

Local versus State Control

There are inevitable trade-offs in facility finance associated with the balance of state versus local control. The foremost benefit of complete local control, as in Michigan now, is that local citizens can have their preferences reflected in facilities. But that system is inequitable and fails to ensure a basic floor of quality for all students.

³⁷ David Arsen, Tom Clay, Thomas Davis, Thomas Devaney, Rachel Fulcher-Dawson, and David N. Plank, "Adequacy, Equity and Capital Spending in Michigan Schools: The Unfinished Business of Proposal A," Citizens Research Council of Michigan and the Education Policy Center at Michigan State University Center, May 2005. Available at <http://www.crcmich.org/PUBLICAT/2000s/2005/schoolcapital.pdf>.

At the opposite end of the spectrum, control of capital finance could be shifted to the state. Massachusetts and Hawaii use variations on the state control model to finance facility investment. In principle, the Michigan Department of Education or another state agency could decide where and what type of spending on facilities takes place across the state. Local input could be maintained by permitting districts to submit facility plans and funding requests to the state, even if local districts were to lose their authority to levy debt or sinking fund millages. The state could establish a school facility fund with revenues from the sale of long-term bonds that could be repaid with dedicated state revenues.

Having the state make decisions about school infrastructure would require the establishment of clear criteria for the eligibility and priority of capital projects, and increased capacity of the state to implement them. A state-controlled system could be vastly more equitable for students and taxpayers. In theory, it would also permit the establishment of adequate facilities for all students, so long as state policymakers were committed to that goal.

The primary trade-off to these potential benefits of full state control is obviously the loss of local choice. That is an important consideration insofar as preferences regarding school facilities vary across communities, and especially if citizens lack confidence in state policymakers. Given policymakers' disregard of adequacy while controlling school operational funding, Michigan citizens might have reservations about the state's commitment to maintaining adequate facilities in a state-controlled system.

It would be possible to establish hybrid arrangements between state and local governments. To take just one example, the state could assume control of facility financing through long-term bonds while districts continue to have access to sinking funds revenues. We will consider other hybrid arrangements below.

Equalizing State Facility Grants to Local Districts

If a shift to state control of facility finance is too dramatic given Michigan's traditions and values, it would be possible to enhance equity and adequacy with equalizing state facility grants to local districts and charter schools. Different types of grants are possible.

Facility Foundation Grant

Just as Michigan currently allocates operational funding through per-pupil foundation grants, a foundation grant system could be designed for facilities. Under a foundation program, policymakers would set the foundation level for each district and set a required local property tax effort (millage rate) for districts to receive state aid. Suppose the foundation level is set at a level sufficient to finance adequate facilities. A district's per-pupil state aid would be determined by the difference between this foundation level and the amount of revenue generated locally through the required tax effort. Districts with sufficiently high fiscal capacity would receive no state aid, since the revenue they generate through the required tax effort surpasses the foundation level. One benefit of a foundation system is that it could be easily applied to charter schools.

Foundation grants, however, are much better aligned with operational funding than capital funding. Foundation grants are typically distributed on a per-pupil basis, but district or charter school enrollment can fluctuate dramatically over the 15- or 20-year life of a capital bond. A foundation program also would be difficult to integrate with the highly variable

capital stocks and preexisting long-term debts across local districts. Additional foundation funding would be unnecessary in districts that have already made long-term investments in school facilities. But allocating capital foundation grants to other districts with similar taxable value but lower past fiscal effort would surely raise questions of fairness.

Guaranteed Tax Base

A guaranteed tax base (GTB) system would allow districts to continue making decisions about school infrastructure but would subsidize low-property-wealth districts. In this system, the state would set a minimum per-pupil taxable value. When a district with property wealth below the GTB voted to approve a millage, the state would subsidize the difference between the revenues generated by the district's actual property tax base and the revenue that would be generated with a tax base at the guaranteed level. A GTB could be established for both capital bond millages and sinking fund millages.

A GTB system preserves local control but improves equity for students and taxpayers by raising low-property-wealth districts' ability to pay.

A GTB system preserves local control but improves equity for students and taxpayers by raising low-property-wealth districts' ability to pay. In one respect local control would expand under a GTB because infrastructure options that were previously available only to wealthier districts would become viable in poorer districts. A GTB system, however, does not ensure that all students have adequate facilities because local voters could fail to approve capital millages despite the state subsidies. A GTB also is not well suited to funding charter school facilities.

Targeted State Facility Funding: Categorical Grants

Another option would be for the state to fund selected capital projects. Perhaps the most promising use of targeted facility funding is in conjunction with a GTB system to address instances of inadequate facilities despite a given level of local tax effort. Eligibility for categorical funding could be made conditional on districts levying a certain number of debt mills within a GTB system. If the revenue raised fell short of the funding needed to attain adequate facilities, the difference could be covered with categorical facility grants by the state.

SECTION 7

Fiscal Aspects of School Choice Policies

The expansion of school choice policies is one of the most important changes in K-12 schooling in the United States over the last quarter century, and this is certainly true for Michigan's education system. Participation rates in Michigan's two main choice policies—charter schools and interdistrict transfers—are among the highest in the nation. By attaching operating revenues to students rather than districts, Proposal A greatly facilitated the implementation of Michigan's choice policies. In this section, we describe how these policies work and identify some financial challenges they pose.

The Rules Matter

State laws and administrative guidelines strongly shape how choice policies work. These regulations and funding arrangements structure the behavior of schools and families in the educational market and to a large extent determine how choice policies impact a state's education system. It is no surprise that these policy details are often the focus of legislators' interest and deliberation, or that they vary considerably across states.

The Education Commission of the States provides information on arrangements for funding charter schools in the 44 states with charter school laws, along with the District of Columbia. Several states establish parity in base (e.g., foundation) funding between charter and district schools, although (as in Michigan) access to facility funding may differ. Other states differentiate funding based on the type of charter school. For example, in Arizona, Massachusetts, and Oklahoma charter schools authorized by local school districts are funded by the district, while other charters are funded by the state. In still other states, such as Kansas and Illinois, charter funding is not fully stipulated in state law but depends in part on negotiations between individual charter schools and the local district in which they are located.

States differ in their provision of charter school facility and start-up funding, in the fees authorizers may charge the schools they authorize, and in rules such as whether charter schools must abide by local collective bargaining agreements or participate in school employee retirement systems.

There is also considerable variation across states in whether interdistrict school choice is allowed and under what terms.

Michigan's Charter School Policy

Charter schools (also designated public school academies) are publicly funded schools that operate independently of traditional school districts under charters granted by a variety of public agencies. These agencies include local school districts, intermediate school districts, community colleges, and public universities. Public universities have granted over 90

percent of Michigan's charters. Charter schools are governed by an appointed school board approved by their authorizer. Charters may locate anywhere in the state and enroll students from any school district. When Michigan's charter law passed in December 1993, it included a cap on the number of charter schools. This cap was eliminated in 2011.

As we noted in [section 3](#), Michigan charter schools receive per-pupil foundation revenues entirely from the state. Like local districts, the total foundation revenue they receive depends on the number of pupils they enroll. Per-pupil foundation allowances for charter schools are equal to the lesser of the foundation allowance of the district in which the school is located or the PSA maximum foundation (\$7,631 in 2017-18). This feature of the law has always meant that charters (like most districts) receive lower foundation allowances than high-revenue hold-harmless districts.

Since charter schools cannot levy property tax mills to build or buy facilities, most pay for them out of operating revenues.

Like local districts, charter schools also receive federal, state, and ISD categorical grants for specified purposes. As we mentioned in [section 6](#), since charter schools cannot levy property tax mills to build or buy facilities, most pay for them out of operating revenues. Charter schools do, however, have access to tax-exempt financing for facilities through the Michigan Public Educational Facilities Authority, which offers bonds and other loan programs to support the cost of facilities. Charter schools are not permitted to charge tuition.

Charter authorizers can retain three percent of the foundation funding for students in schools they charter. Most Michigan charter schools contract with private educational management organizations (EMOs) that charge additional fees for services they provide. A distinctive feature of Michigan's charter sector is the large role played by for-profit EMOs. Miron reports that 79 percent of Michigan charter schools are managed by for-profit EMOs, by far the highest share in any state.³⁸ In Missouri, the next highest state, 37 percent of EMOs are managed by for-profit EMOs.

Charter schools must adhere to many (but not all) of the rules and regulations governing other public schools. They must employ certified teachers, and their students must take state-mandated tests. Charter schools are required to accept all students who apply unless there is a shortage of space, in which case they must base admissions on a fair lottery. Most charter schools do not participate in the Michigan School Employee Retirement System, and in only a few are teachers organized in unions and work under a collective bargaining agreement. Michigan permits cyber charter schools in which instruction takes place online, not in brick-and-mortar buildings.

Michigan's Interdistrict Choice Policy

Interdistrict choice opens options that are within the traditional public school system but outside a student's district of residence. School districts may decide each year whether to accept nonresident students. They may also decide whether to open themselves only to

³⁸ Gary Miron, "Education Management Organizations," in *Handbook of Research in Education Finance and Policy*, ed. Helen F. Ladd and Edward B. Fiske (New York: Routledge, 2008), 475-94.

students living within the same intermediate school district, or also to accept students from contiguous school districts in other ISDs. Districts that accept nonresident students must publicly announce their openings each year. They may designate the number of available spaces by school, grade level, and program. If they receive more applicants than openings, districts (like charter schools) must use a lottery to make enrollment decisions. Districts may not prevent resident students from enrolling in another district.

Students who enroll in a district where they do not reside bring their full foundation grant with them, unless they move to a district with a lower per-pupil grant. In that case, they bring an amount equivalent to the grant in the district to which they move.

School Choice Participation in Michigan

Participation in both choice programs has grown considerably. The 1998–99 school year was the fourth year of Michigan’s charter school policy and third year for interdistrict choice. In that year, Michigan had 136 charter schools enrolling 34,000 students, or about 2.2 percent of statewide K–12 enrollment. That same year, 14,700 students, or 0.9 percent of Michigan students, participated in interdistrict choice.

Since 1999, total school choice participation has increased by over 700 percent. Table 6 shows that in 2017–18, nearly a quarter of Michigan’s students participated in either charter schools (10 percent) or interdistrict choice (14.3).

Table 6. Michigan Student Enrollment by Sector, 2017–18

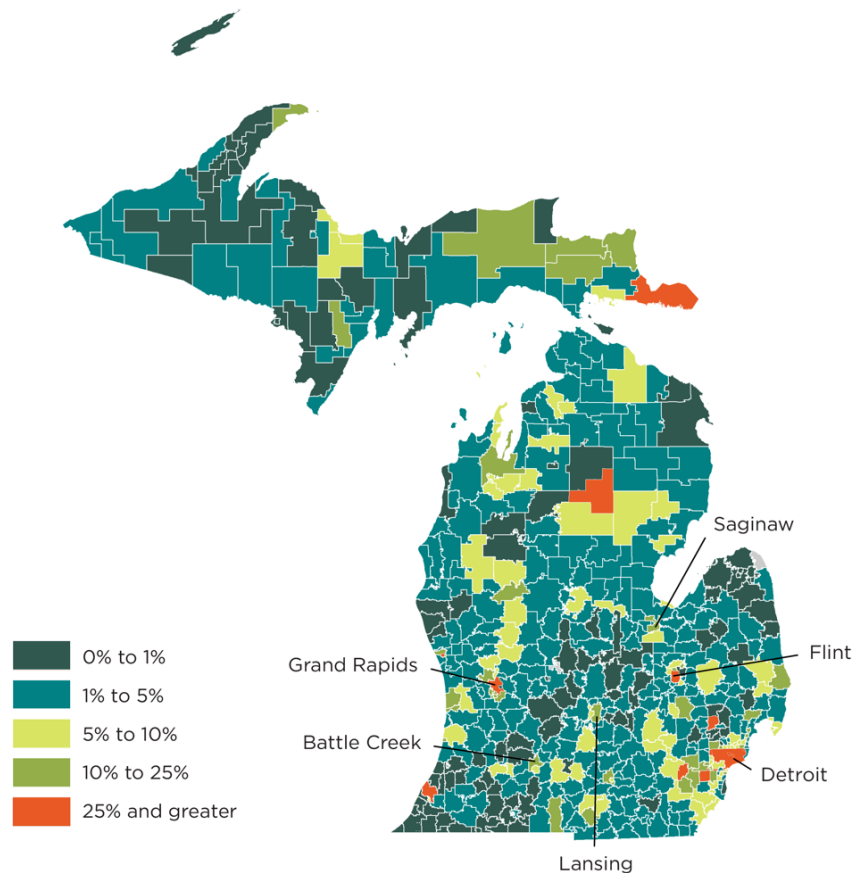
	Number	Percent
Zoned traditional schools	1,111,274	75.7
Charter	146,961	10.0
Inter-district choice	210,015	14.3
All school choice	356,982	24.3
Michigan students	1,468,256	100.0

Participation rates in both of Michigan’s choice policies vary considerably across the state’s regions and local districts, and also differ between the two programs. Figure 14 shows that while most school districts have at least some students who attend charter schools, in only a small share of districts does charter enrollment represent more than a very small percentage of resident students. In 2017–18, 35 districts lost at least 15 percent of resident students to charters, and 18 districts lost at least 25 percent. As Figure 14 shows, most districts with higher levels of charter school participation are in central cities and nearby suburban areas, but extensive charter participation is also found in some rural districts.

In 2017–18, more than half of Detroit’s resident students did not attend the city’s public school district. This represents a net loss of 57,000 students to charter schools and interdistrict choice. Flint’s net enrollment loss to choice programs was over 10,000 students, or about 70 percent of the city’s resident students. Grand Rapids’ net enrollment loss in 2017–18 was nearly 9,500, or about 38 percent of resident students. In each of these

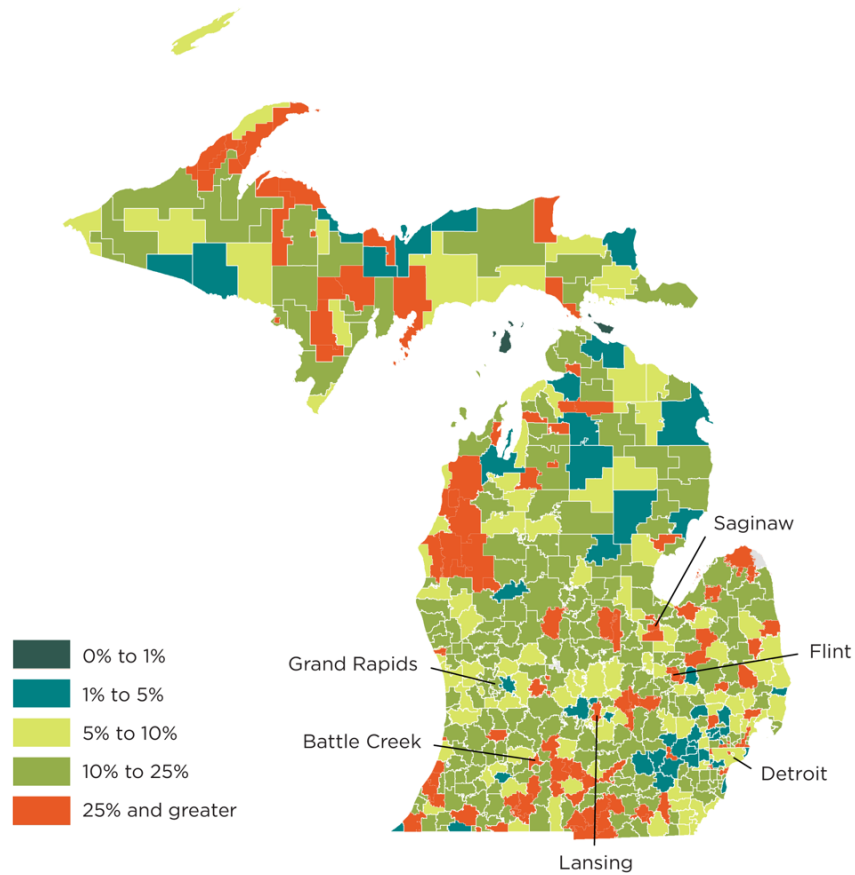
cities enrollment losses to charter schools far exceed the net enrollment losses through interdistrict choice.

Figure 14. Percentage of Resident Students Who Attend Charter Schools, 2017–18



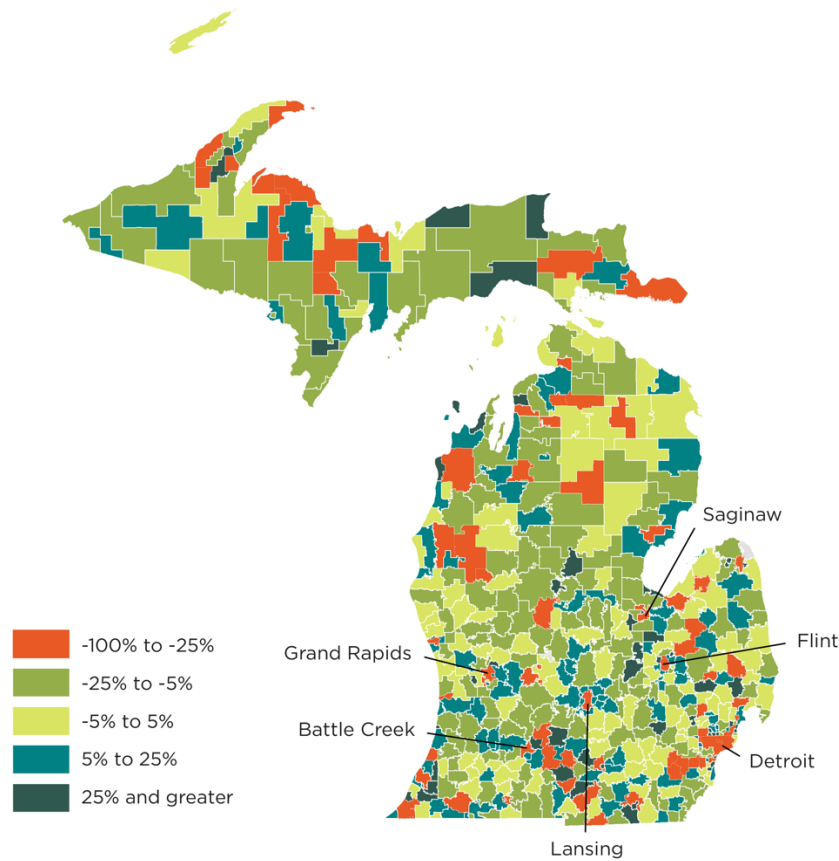
Compared to charter schools, participation in interdistrict choice is dispersed far more widely across Michigan. As Figure 15 shows, in many areas of the state, including rural areas, 25 percent or more of students attend a district in which they do not live. In most local districts, however, the outflow of students to other districts is offset to a considerable extent by the inflow of nonresident students. Where this happens, the financial consequences of student transfers are greatly muted.

Figure 15. Percentage of Resident Students Who Transfer to Other Districts through Interdistrict Choice, 2017–18



A subset of Michigan districts have significant net gains and losses in enrollment (and funding) due to interdistrict choice. Figure 16 shows the net percentage change in district enrollment. Most of Michigan's medium-sized and large cities experience substantial net enrollment losses to suburban districts. Sizable net inflows and outflows of students are also evident in many of Michigan's rural districts. Statewide, interdistrict choice produces net enrollment gains of at least 25 percent in 58 districts, and net enrollment losses of at least 25 percent in 81 districts.

Figure 16. Net District Enrollment Change Due to Interdistrict Choice



Funding Levels in Districts and Charter Schools

In a 30-state analysis of public revenues available to traditional public schools and charter schools, Batdorf et al. found that in most states charter schools have access to far lower levels of public revenue than traditional public schools.³⁹ The authors found that on average charters received 28 percent less funding than traditional public schools and that this gap widened between 2006 and 2014. Michigan's charter-district funding gap, however, is smaller than in most other states (19.7 percent) and is declining over time. The funding gap is primarily due to two factors: charter schools' lack of local property taxation for facilities, and lower special education funding due to charters' smaller number of students with disabilities. The revenue gap between Michigan's charters and districts is largely offset on the expenditure side of the budget by lower charter spending on student transportation and employees' retirement benefits.

³⁹ Meagan Batdorff, Larry Maloney, Jay F. May, Sheree T. Speakman, Patrick J. Wolf, and Albert Cheng, "Charter School Funding: Inequity Expands," School Choice Demonstration Project, Department of Education Reform, University of Arkansas, April 2014. Available at <http://www.uaedreform.org/charter-school-funding-inequity-expands/>.

Financial Challenges Associated with Michigan's School Choice Policies

School choice policies, and charter schools in particular, require adjustments to any financing scheme built around a system of local school districts. Charter schools do not have taxing authority. In addition, charters by design are not necessarily permanent schools, but rather continue to operate only so long as they meet the terms of their charters. We focus here on challenges associated with how state financial arrangements shape the incentives charter schools face, as well as issues associated with charter school facility finance, and with financial accountability.

Matching Revenues to Costs

Some of the most important problems associated with school choice funding derive from mismatches between state revenues and schooling costs. Matching revenues to costs is a fundamental objective of any school finance system, with or without school choice. Since the Michigan controls operational funding for all Michigan districts and charter schools, these problems could be resolved with adequate funding that adjusted revenues to costs.

High-Cost Students

Some students cost more to educate than others. Many researchers have documented that choice policies increase the concentration of high-cost students (special education, English-language learners) in certain districts.⁴⁰ On average, Michigan's local districts devote a higher share of their spending to special education services than charter schools, although charters' special education spending is increasing over time.⁴¹ Lower special education enrollments in choice schools simultaneously increase average costs in the district schools the students would otherwise attend. Because Michigan fails to adequately adjust revenues to the higher special education costs, no school has a financial incentive to serve students with disabilities. If revenues were brought in line with service costs, school choices for students with disabilities would expand.

Declining Enrollment

Declining enrollment generates a serious mismatch of revenue and costs in Michigan. School choice has caused steep declines in enrollment and revenue in several Michigan districts.⁴² Such districts face a serious challenge because their revenues fall more rapidly than costs, since some costs are fixed in the short and medium term. Consequently, schools with falling enrollment must cut programs and services for remaining students, reduce employee compensation, or draw down their fund balances. In severe cases, a district's reductions

⁴⁰ Bruce Baker, *Exploring the Consequences of Charter School Expansion in U.S. Cities*, Economic Policy Institute, Washington, DC, July 30, 2016. Available at <https://www.epi.org/files/pdf/109218.pdf>.

⁴¹ David Arsen and Yongmei Ni, "Resource Allocation in Charter and Traditional Public Schools: Is Administration Leaner in Charter Schools?," *Education Policy Analysis Archives* 28, no. 31 (2012). Available at <https://epaa.asu.edu/ojs/article/view/1016>.

⁴² Arsen et al., "Which Districts Get into Trouble."

prompt further loss of students, triggering a self-reinforcing cycle of service cuts and enrollment decline.⁴³

Student Transportation

On average, Michigan school districts spend about \$500 per pupil annually from general fund revenues on student transportation. Low-population-density rural districts generally face higher transportation costs than districts in metropolitan areas. Most charter schools, however, do not provide transportation services to students. This cost is shifted instead to students' families. Adjusting state revenues for the cost of transportation services provided by both districts and charters would improve the adequacy of Michigan's school finance and expand the effective school choice options of some families.

Employee Retirement

Contributions to the state-run school employee retirement system, the Michigan Public School Employee Retirement System (MPERS), have posed a growing strain on district finances. MPERS maintains a defined-benefit pension system as well as defined-contribution and hybrid programs covering school district employees. The system's eligibility and benefit provisions are established at the state level. While the state funded the pension system before 1994, funding responsibility shifted to local districts with the passage of Proposal A. Local districts' annual contribution to the pension system is calculated as a percentage of their payroll, and the rate increased from 14.56 percent in 1995–96 to over 25 percent by 2015–16.⁴⁴

Charter schools whose teachers are employed through an EMO are exempt from participation in MPERS. Charter schools typically set up a 401(k) system for their employees, to which they may contribute 4–6 percent of payroll, substantially below the mandatory cost faced by district employers.

Virtual Charter Schools

Virtual charter schools provide a substantially different and more limited array of services than brick-and-mortar district schools or charter schools. The costs that virtual charter schools face differ correspondingly. If the lower cost of online instruction is not reflected in lower state funding, online course providers have a great incentive to attract low-cost students into low-cost classes—not special education, for example, or high school science labs. Inexpensive online classes with large enrollments would be preferred. Without differential funding, schools losing students to such ventures see their average costs rise, undercutting their ability to continue offering high-cost classes and other services.

Facilities and Equipment

While transportation and employee retirement costs are much lower in charters than in districts, the absence of dedicated facility funding is a clear financial disadvantage for charters. Most must rent their facilities with operating revenues. Financing charters' facilities

⁴³ Michael D'Arcy and Tiphany Lee-Allen, "Charter Schools Pose Growing Risks for Urban Public Schools," Moody's Investor Service Report No. 158801, October 15, 2013.

⁴⁴ House Fiscal Agency, Michigan Public School Employee Retirement System 36 (2015); Michigan School Business Officials, FY2017–18 Employer Contribution Rates, October 2018.

is a challenging aspect of policy design, because a given charter school may not have a long-term presence in a community.

The lack of facility funding, along with start-up costs, creates gaps that for-profit education management organizations help fill. This is one reason that for-profit companies manage a higher share of charter schools in Michigan than any other state. EMOs have access to the capital needed to build or purchase and renovate school facilities, which they rent to the charter schools they are hired to manage.

This solution has drawbacks, however. It is difficult for a charter school board to terminate a management arrangement, no matter how poor an EMO's performance, if doing so means losing the school's building. This generates a lock-in effect for charter schools because it constrains their ability to switch to other management companies or shift to self-management. Economists have studied markets with such lock-in effects. Companies are happy when customers are trapped. It insulates them from accountability and lets them raise prices. A recurring criticism of EMOs' management of Michigan charter schools is that they charge rents for their facilities that are above market values.⁴⁵

Although paid for with public funds, privately owned charter school facilities may also be less available as a community resource than those in traditional public schools.

Although paid for with public funds, privately owned charter school facilities may also be less available as a community resource than those in traditional public schools. Charter schools may be less likely to host public functions such as town hall meetings, civic theater and choral performances, community sport and recreation programs, or provision of public health services.

Another asymmetry arises with the closure of an EMO-managed charter. When a district school closes, ownership of the structure and equipment remains in the public sphere. Former school buildings are frequently converted to use as district offices, early childhood education centers, or community centers. If sold, these assets generate funds for the public school district. Though purchased in part with public revenues, ownership of a closed, EMO-managed charter school building remains with the private company.

One potential inefficiency associated with Michigan's charter facility finance arises when EMOs purchase a closed district school to rent to a charter school. In such instances, taxpayers pay for the building twice, first when the district builds it and then again to pay for the EMO's purchase of the structure through the charter school's funding.

Scale, Duplication, and Coordination Inefficiencies

While many people anticipated that school choice would improve public education efficiency, it also may generate financial inefficiencies through diseconomies of scale, duplication of services, and coordination problems.

⁴⁵ Detroit Free Press, "The State of Charter Schools," Special Report, June 22–24, 2014.

The enrollment of most charter schools (and some districts) is well below efficient scale, which research suggests is about 1,500 students.⁴⁶ Because a smaller school spreads fixed overhead costs (e.g., central administrative functions) over fewer students, per-pupil costs are higher in charter schools, especially those enrolling a few hundred students or less. On the other hand, management companies that operate several charter schools can lower these scale diseconomies.

The expansion of charter schools establishes two parallel education systems within the same geographical area, and this can increase per-pupil overhead costs due to the duplication of services. Key examples include administrative functions (legal, finance and purchasing, human resources, curriculum development), specialized instructional staff, and operations and maintenance.

In areas where the charter sector is no longer small relative to district schools, failure to coordinate operations of district and charter schools can generate inefficiencies. Detroit is not the only Michigan city experiencing this problem, but it is a prominent example of the inefficiencies of a poorly coordinated education market.⁴⁷

Very high rates of student mobility among schools disrupt the establishment of durable relationships between children and adult educators.⁴⁸ Hypermobility without centralized records means that schools often lack basic information, including students' contact information and academic records. In urban areas with scores of vacant school buildings, there is no coordination of supply and demand to ensure that schools open where they are most needed or that the worst-performing schools exit the market.⁴⁹

Public Transparency for School Finances

For Michigan's citizens and taxpayers, it is not enough to rely on the "market" and say, "Schools are accountable to parents." The choices of parents and private management companies may not correspond to the purposes of public education. Schools that receive public funds should be accountable to the public. In Michigan, charter schools have the same legal standing as local school districts and submit the same financial reports to the state. However, if a charter school is managed by a private company, some financial information may not be readily available.

Perhaps most consequential is spending on administration, rent, and employee salaries and benefits. Information on district employee compensation is available in collective bargaining agreements posted on district websites. Salary and benefit information for charter school employees, however, is often unavailable. The Michigan Department of Education's easily accessible *Bulletin 1014* lists average teacher salaries in school districts, but does not

⁴⁶ Matthew Andrews, William D. Duncombe, and John Yinger, "Revisiting the Economies of Size in American Education: Are We Any Closer to Consensus?," *Economics of Education Review* 21, no. 3 (2002): 245–62; William Duncombe and John Yinger, "Does School District Consolidation Cut Costs," *Education Finance and Policy* 2, no. 4 (2007): 341–75.

⁴⁷ Coalition for the Future of Detroit School Children, *The Choice Is Ours*, 2015. Available at http://detroiteducationcoalition.org/wp-content/uploads/2018/09/CFDS_ChoiceIsOurs.pdf

⁴⁸ Erin Einhorn and Chastity Pratt Dawsey, "The Children of 8B: Choice, School Hopping Brings 'Chaos' to Detroit Classrooms," *Bridge Magazine*, October 1, 2018. Available at <https://www.bridgemi.com/detroit-journalism-cooperative/children-8b-choice-school-hopping-brings-chaos-detroit-classrooms>.

⁴⁹ Coalition for the Future of Detroit School Children, *The Choice Is Ours*, 2015. Available at http://detroiteducationcoalition.org/wp-content/uploads/2018/09/CFDS_ChoiceIsOurs.pdf

provide equivalent information for many charter schools.⁵⁰ Charter schools typically report fees paid to a management company as an administrative expenditure, without distinguishing this spending from other central administrative spending. The transparency of charter schools' rental payments to management companies is often limited because rental payments are buried in reported administrative expenditures. Improvements in financial reporting guidelines could improve the transparency of charter schools' management fees, rental payments, and employee compensation.

Options for School Choice Finance

Michigan's 2018 adequacy study, discussed in [section 8](#), addressed many of the key financial issues related to school choice policies discussed in this section. It recommends parity in the base per-pupil funding for districts and brick-and-mortar charter schools, with lower funding for cyber charter schools. The study recommends additional foundation grant weights for high-cost students. And it recommends separate funding for employee retirement and student transportation for both districts and charters tied to their actual costs. Before advancing our recommendations in [section 9](#), we first review and evaluate this important study.

⁵⁰ Available at: <https://www.michigan.gov/mde/0,4615,7-140-6605-21514--,00.html>

SECTION 8

Michigan's School Finance Adequacy Studies

Michigan's 2018 school finance adequacy study represents a landmark opportunity to move forward in fixing long-standing problems, including many highlighted in previous sections of this report. The study is ambitious, well designed, and well executed. It provides extremely useful information for designing Michigan's school finance policies. Because it relies on stronger research methods, the 2018 study supplants the only other Michigan adequacy study, which was conducted in 2016. In this section, we provide brief descriptions of adequacy studies in general and the 2016 Michigan study, and then turn to a fuller description of the methods and findings in the 2018 study. The 2018 adequacy study is the best available empirical basis for designing an efficient, equitable, and adequate system of education finance in Michigan.

What Are Adequacy Studies?

Adequacy studies are designed to link the resources schools receive to the outcomes expected by the state. They grew out of the standards-based reform movement in education. As states implemented specific learning standards and performance expectations, along with consequences for schools and districts failing to meet them, policymakers sought evidence on the resources schools needed to provide students with opportunities to meet those standards. Accordingly, adequate funding is an essential complement to accountability policies.

Adequacy studies are designed to link the resources schools receive to the outcomes expected by the state.

Adequacy studies entail a two-step procedure. First, they estimate the cost of a basic education for a typical student. Second, they estimate additional costs associated with special circumstances of students or districts.

As we noted in [section 2](#), the concept of adequacy defines “cost” as the minimum funding necessary to achieve a given educational outcome. It requires that schools use best practices, that is, that they be efficient. Consequently, costs cannot be directly observed in district budgets or state school finance data and instead must be estimated by researchers. By definition, variations in costs across schools are due to factors beyond schools' control. Adequacy combines the principles of equity and efficiency in school finance by asking what resources are needed to provide equitable education when schools are operating efficiently.

More than 30 states have conducted adequacy studies over the past 15 years, and several have conducted multiple studies. Researchers have developed four approaches to estimating the costs of an adequate education:

1. The Professional Judgment (PJ) approach. PJ is the most widely used approach in adequacy studies. It relies on the experience and expertise of a state's educators,

meeting in panels, to identify the resources needed to ensure that all districts, schools, and students can meet state standards. Panels identify school-level personnel and nonpersonnel resources and district-level resources. Adequate resources are specified for students and schools with no special needs (the base cost), and then separately for special-needs students and districts.

2. The Successful School District (SSD) approach. The SSD approach determines an adequate base cost by using the minimum per-pupil expenditure level of districts that currently meet or exceed state performance standards. The SSD approach analyzes quantitative district-level data, not information on staffing or programs. It excludes atypical districts that meet state standards, for example, those with concentrations of highly educated parents. The approach does not identify specific uses of resources that generate successful school district base costs, and is not well suited to identifying differential costs for special-needs students.
3. The Evidence-Based (EB) approach. The EB approach draws on findings from academic research on the achievement effects of specific personnel and nonpersonnel resources. It then identifies composite sets of resources that prototypical schools and districts would need to meet state academic standards. The approach specifies staffing levels for detailed job categories and programs to promote efficient use of resources. It includes instructional resources (teachers, textbooks, technology), social-emotional supports (social workers, counselors), administration, and other resources needed for student success. The approach can identify both base costs and differential costs for students and districts with special circumstances. Proxy
4. The Cost Function (CF), or statistical, approach. The CF approach applies econometric methods to quantitative data for all districts in a state to estimate the funding needed to achieve a given level of student achievement while controlling for student and district characteristics. The approach uses variables to approximate district efficiency in order to estimate both base costs and differential local costs. Due to the complexity of its statistical procedures, the CF approach has proven difficult to explain to policymakers and citizens. The CF approach does not provide detailed information on specific types of personnel and nonpersonnel resources, so it is best used in combination with the PJ or EB approaches.

Michigan's 2016 Adequacy Study

In December 2014, as part of a lawmaking deal to secure sufficient votes for passage of road construction legislation, the Michigan Legislature passed Public Act 555 of 2015, which for the first time authorized “a comprehensive statewide cost study” to determine the “sufficient resources per pupil” for students to achieve state academic standards. PA 555 set forth coherent and detailed specifications on the information the cost study must generate, including estimates of the base cost and variable costs associated with student disabilities, socioeconomic status, and English-language proficiency, as well as district population density and regional cost of living. The statute also called for estimates of transportation, school building construction, operations and maintenance, community service, and other costs.

The state selected Augenblick, Palaich and Associates (APA), an experienced and nationally prominent Denver consulting firm, to perform the cost study. The state’s contract with APA

stipulated that the contractor use the Successful School District method to estimate costs. This feature of the contract was striking and unfortunate, since the SSD approach cannot fulfill several of the study requirements specified in PA 555. APA provided its report, *Michigan Education Finance Study*, to the state in June 2016.⁵¹

The 2016 study estimated a base cost of \$8,667 per pupil and recommended adjustments for English-language learners (ELL) and at-risk students. While a useful step forward, the study had several limitations. Many of these were inherent to the SSD method the state requested.

In accord with its contract, APA estimated the expenditures of Michigan districts whose performance on state tests was *above average*, but it did not estimate the cost of *meeting* state content and proficiency expectations, a much higher standard that was specified in PA 555. On some grade-level subject tests, merely 20 percent of students meet the state's proficiency standards. APA suggested alternative successful district definitions in its report, but all were subject to concerns that selected districts were not typical and were not fully meeting state standards. Consequently, the study was not designed to estimate the base cost of actually meeting state standards and accordingly was not—strictly speaking—an adequacy study.

The 2016 study had several other gaps that limit its relevance. It did not include information on charter schools, special education costs, or capital construction costs. It did not provide information on cost variations due to district size or regional cost of living. And it could not provide information on specific staffing or programmatic requirements for educational adequacy.

Michigan's 2018 Adequacy Study

Formed in 2016, the School Finance Research Collaborative, a bipartisan statewide group of 22 business leaders and education experts, secured funding from the Kellogg, Mott, and Skillman foundations and 32 Michigan ISDs to perform an adequacy study. The research project was supported by a 15-member steering and technical committee and a nine-member advisory board. The Oakland Schools Education Foundation served as its fiscal agent.

In response to a national request for proposals, the Collaborative selected a joint proposal from Augenblick, Palaich and Associates, which performed the 2016 study, and California-based Picus, Odden and Associates to perform the cost study. Picus and Odden are prominent school finance researchers and professors at the University of Southern California and University of Wisconsin, Madison, respectively. They wrote the most widely used graduate-level school finance textbook, now in its fifth edition. The combined experience and expertise of these two organizations is unsurpassed in the field of adequacy research.

The School Finance Research Project Study team used both the Professional Judgment and Evidence-Based costing-out methodologies. The use of these two methods is strongly complementary. The final report, released in January 2018, also included information from

⁵¹ Available at https://www.michigan.gov/documents/budget/Michigan_Education_Finance_Study_527806_7.pdf.

APA's Successful School District work in 2016. We briefly summarize the research methods used in the PJ and EB analyses.

PJ Research Methods

The PJ approach used a sophisticated multilevel sequence of panels to estimate the resources needed to meet state standards in hypothetical representative schools and districts of varying size.⁵² The PJ study structured panels in the following progression: four school-level panels, four special-needs panels, four district-level panels, a charter school panel, a chief financial officers panel, and a statewide panel. Panelists reviewed work by other panels to enhance reliability.

Each panel had between nine and 12 participants, including, as appropriate, combinations of classroom teachers, special-needs service providers, principals, superintendents, technology specialists, and school business officials. The final report lists panel participants and the membership of the Collaborative's executive committees.

Panelists were instructed to identify the resources needed to meet all Michigan standards and requirements, including the Michigan Merit Curriculum and graduation requirements, as well as state assessment, accountability, and educator evaluation requirements. The researchers stressed to panelists that they should identify the resources needed to meet state standards in the most efficient way possible.

Panelist identified school-level personnel resources (classroom teachers, psychologists, counselors, librarians, teacher aides, administrators, nurses, substitute teachers) and nonpersonnel resources (textbooks, supplies, technology hardware and software). Other resources included teacher professional development, before- and after-school programs, preschool, and summer school. District-level resources included central office administrators and support staff, operations and maintenance, insurance, security, and assessment. While panelists identified adequate human and material resources, they did not specify the monetary cost of those resources.

EB Research Methods

The Evidence-Based approach emerged as an attempt to improve upon other costing-out methods by grounding its definition of educational adequacy in evidence from high-quality, peer-reviewed educational research. Elsewhere, Odden and Picus describe the EB model and supporting academic research at length.⁵³ Like the PJ approach, the EB model specifies base and differential costs and can be readily calibrated to different grade levels and to student, school, and district characteristics. The EB approach specifies adequacy across a range of detailed personnel and nonpersonnel resources similar to those we have described for the PJ approach.

⁵² Representative schools included one preschool program; two elementary schools (of 270 and 390 students); three middle schools (of 180, 420, and 735 students); and four high schools (of 220, 500, 800, and 1,200 students). The team also designed four representative districts: very small (670 students), small (1,700 students), moderate (5,000 students), and large (13,590 students). The demographic characteristics of these schools and districts closely resembled Michigan schools and districts on average.

⁵³ Allan Odden and Lawrence Picus, *School Finance: A Policy Perspective*, 5th ed. (Boston: McGraw-Hill, 2014).

The key difference between the EB and PJ approaches (as implemented in the Michigan study) is that the EB model's recommendations are based on prior research on the student achievement effects of specific resources, while the PJ recommendations are based on the consensus opinions of experienced educators.

Staff Compensation

The PJ and EB methods define education adequacy in terms of the staffing and nonpersonnel resources needed in various types of schools, independent of employee salaries and benefits. The PJ panels, for example, specify class sizes and an adequate number of counselors, but they do not specify the salaries and benefits of these employees. With both approaches the cost of employee compensation must be added after staffing levels are identified in order to estimate base and differential costs.

With both (the PJ and EB) approaches the cost of employee compensation must be added after staffing levels are identified in order to estimate base and differential costs.

For each occupational title, the Collaborative research team set salaries at the statewide average for school employees in that position in the previous year, 2015–16. They used reasonable estimation procedures in cases where they were unable to obtain the desired salary data.

Payments for employee retirement are the largest benefit cost. District employees participate in the Michigan School Employee Retirement System (MPSERS), which includes both defined-benefit and defined-contribution programs. Since eligibility to participate in MPSERS and benefit guidelines are set by the state, required employer contributions are costs from the perspective of districts. Before Proposal A, the state paid employers' retirement costs for all school employees. At the time of the adequacy study, the state required districts to pay 25.56 percent of their employees' salaries for ongoing pension costs, while the state paid 11.04 percent "off the top" for unfunded pension liabilities.

Retirement costs vary for charter schools (which generally do not participate in MPSERS) and among districts depending on the initial employment date of their employees. In order to establish base costs, it was therefore necessary for the research team to standardize them across schools. To do so they incorporated 4.6 percent of salary for ongoing pension payments as part of the base cost for all districts and charters. The 4.6 percent is derived from prevailing charter school payments for employee retirement. The balance of the retirement costs above 4.6 are real and need to be included in total costs, and the study reports them in a secondary estimate of adequate base costs.

Employee health insurance is the other large benefit cost. The research team incorporated a \$12,000 per employee annual payment into the base cost for employee health insurance. Other employee benefits costs are Social Security (6.20 percent on annual earnings up to \$127,200), Medicare (1.45 percent), and unemployment insurance (0.6 percent).

2018 Adequacy Study Findings and Recommendations

Both the PJ and EB methods stipulate that adequate schools as well staffed and equipped. The cost estimates are based on schools with rich learning opportunities and support for typical and struggling students. Most Michigan parents would certainly welcome sending their children to schools with the resources the study identifies as necessary for all children to have realistic opportunities to meet state academic standards. We highlight some of the features of adequate schools in the School Finance Research Collaborative's report, and then turn to key findings and recommendations from the study.

Most Michigan parents would certainly welcome sending their children to schools with the resources the study identifies as necessary for all children to have realistic opportunities to meet state academic standards.

The study's adequate schools have:

- Small class sizes, with student-to-teacher ratios of 20:1 in kindergarten through grade 3 and 25:1 in grades 4–12;
- Instructional coaches and significant time for teacher planning, collaboration, and professional development to help teachers improve their instructional practice;
- Student support from counselors, social workers, and psychologists;
- Sufficient nurses or health aides to provide necessary medical care to students and allow teachers and administrators to focus on classroom instruction;
- Before- and after-school programs and summer learning opportunities, particularly for ELL students and non-ELL students in poverty;
- \$190 per student for instructional and library materials; and
- \$250 per student for school computer and technology equipment.

The study's key recommendations for funding adequacy derive from the following analyses of costs:

- The base cost to educate a regular K-12 Michigan student is \$9,590. This includes school- and district-level costs, but does not include transportation, food service, or capital costs, and only includes pension costs at 4.6 percent of wages.
- It costs an additional 35 percent above the per-pupil base cost to educate students in poverty (0.35 weight).
- The additional cost to serve ELL students depends on their English fluency as measured by the World-Class Instructional Design and Assessment (WIDA) English Proficiency Standards.⁵⁴ The weight for the highest-need, WIDA 1–2, students is 0.70; 0.50 for WIDA 3–4 students; and 0.35 for WIDA 5–6 students.
- Additional costs for special education students also depend on the severity of disability as measured by the share of the day that students are in a regular classroom. The study estimated funding weights of 0.70 for mild disabilities and 1.15 for moderate disabilities and recommended full state reimbursement for students with severe disabilities.

⁵⁴ Available at https://www.wida.us/standards/Resource_Guide_web.pdf.

- Career and technical education costs an additional 10 percent above the base cost for each enrolled student.
- Adjustments to account for differential costs associated with district enrollment size, regional cost of living, and geographic isolation were estimated.
- Student transportation costs were estimated at \$973 per rider until a more comprehensive study is conducted.

The study also produced the following recommendations:

- Brick-and-mortar charter schools should receive the same per-pupil base funding and differential funding for special needs as district schools.
- Full-day preschool for children aged three and four should be offered, with one teacher and one aide per 15 students, at a per-pupil cost of \$14,155.

The study reveals the benefits of merging findings from two different costing-out methodologies. The PJ and EB methods differed in recommended resource allocation in a number of areas, but the most significant cost difference turned on class size for grades K-3. The PJ panels indicated that a class size of 20 was adequate for a base school, while the EB approach identified a class size of 15 in the early elementary grades based on a review of available research. The research team used the 20-student class in its final recommendations. Without this adjustment the EB base cost was \$554 above the PJ base cost. Use of the 20-student class size in grades K-3 left a mere \$8 difference in the base costs recommended by the EB and PJ methods.

The approaches also differed somewhat in other areas. Based on available research, the EB method devoted more resources to improving teachers' instructional practice. This included instructional coaches, teacher professional development, and time for teacher-team consultation and class preparation during the school day. The EB method also linked its staffing of counselors, tutors, and ELL and after-school and summer programs to lower staffing needs for students with mild and moderate disabilities.

Reflections on the 2018 Michigan School Finance Research Collaborative Study

Adequacy studies link funding to school improvement and accountability. Otherwise state school-funding decisions are based on politics and state revenue projections rather than children's instructional needs. These deliberations are anything but transparent. Adequacy studies improve this process considerably. By establishing clear and defensible funding benchmarks, they erect principled guardrails for legislative deliberations.

The 2018 adequacy study provides critical building blocks for an informed conversation among Michigan's citizens and policymakers about the design of a superior funding system.

The 2018 adequacy study is a valuable contribution to the pressing task of redesigning Michigan's school-funding system. The study does not fully address all school-funding issues in need of research and changes in policy, but it provides critical building blocks for an informed conversation among Michigan's citizens and policymakers about the design of a superior funding system.

It is not surprising that the study recommends increased investment to adequately fund Michigan schools. Over the last 15 years, Michigan has substantially raised academic outcome standards while reducing real per-pupil funding. Student performance has also slipped relative to other states.

As this report has documented, Michigan's funding for students with special needs is broken. Over a third of Michigan's students qualify as at-risk, six percent are ELL, and 13 percent have disabilities. The study's estimates of the additional costs of educating these special-needs students are sensible and critically important. Everyone should understand that special-needs students cost more to educate. Apart from equity for these students, no state can have fair and efficient school choice policies without simultaneously matching revenues to the differential costs of high-need students. The study's recommended additional funding weights for special-needs students are within the range of previous academic research documenting these cost differentials, as well as the weights used in the funding systems of high-performing states like Massachusetts.

The study's recommendation to separate the costs of student transportation and employee retirement from the base cost is smart. Both are legitimate costs, and they differ substantially among districts and between district and charter schools. Isolating them from the base cost is an essential step in establishing funding parity between charters and districts (as is facility funding for charters, to be discussed shortly). In recent years state lawmakers have made substantial changes to state employee retirement systems. Future changes are possible. Separating retirement costs (above 4.6 percent of wages and salaries) from base costs will make these policy decisions more transparent and insulate funding for children's learning opportunities from such changes in policy.

The adequacy study also estimates differential cost adjustments for three interrelated district features, district enrollment size, regional cost of living, and district isolation. We differ somewhat with the study's recommendations in these areas.

Small-enrollment districts face higher per-pupil costs because their overhead costs (like central administration and instructional support) are spread over fewer students. The study recommends an increase of nearly \$2,000 per pupil in the base funding of very small districts (those with no more than 670 students) and an increase of about \$700 in small districts (no more than 1,700 students). The best empirical studies of scale economies in K-12 education do indeed find substantially higher costs in very small districts but little difference in districts with over 1,500 students.⁵⁵ Specifying the added costs of very small size is also complicated by the fact that local options exist to diminish diseconomies of scale, such as district consolidation or contracting service provision through a district's ISD. In addition, although most charter schools operate well below efficient scale (1,500 students), determining the added per-pupil cost of their small enrollment is greatly complicated by the fact that many charters are operated by management companies that spread overhead costs over many schools.

Base cost adjustments for variations in regional cost of living are a common element of state adequacy studies. Because spending by K-12 schools is concentrated in employee compensation, the wages and salaries that schools must pay to attract and keep talented employees are the most important component of regional cost. Researchers estimate these

⁵⁵ Duncombe and Yinger, "School District Consolidation."

cost differentials with comparable wage indexes that are based on the wages earned by noneducation employees in the region who have skills similar to those teachers have. The 2018 adequacy study estimated comparable wage indexes (CWIs) for Michigan to be applied to districts' base cost, increasing the base-cost revenue in high-wage regions and reducing base-cost revenue in low-wage regions.

As in other states, the estimated CWI for Michigan generally directs more revenue to high-wage metropolitan areas and less to rural areas, where prevailing wages are lower. In contrast to states with large regional cost variations, however, cost differences across Michigan's regions are relatively modest. Additionally, because CWIs are calculated at the regional level, they do not distinguish between central-city and suburban districts. Consequently, they do not account for additional pay that urban schools might need to offer in order to attract prospective employees to settings that are more challenging than those in suburban schools.

Incorporating cost adjustments for district size and regional cost of living would substantially complicate Michigan's funding system. We believe that neither is as important as establishing sound base funding and differential funding for special-needs students. District size and regional cost adjustments are lower priorities and should not distract from more important elements of policy design.

Moreover, and importantly, the consequences of omitting both of these adjustments from state funding formulas are muted insofar as they largely offset each other. Additional funding for small districts would go mostly to rural districts, while regional cost of living would reduce funding for most of the same rural districts. Policymakers might consider an alternative approach by building on the adequacy study's small cost adjustment for geographical isolation. This added cost arises because families and schools in very remote areas are less able to draw on social and health services from organizations other than schools.

The Cost to Implement the Adequacy Study's Recommendations

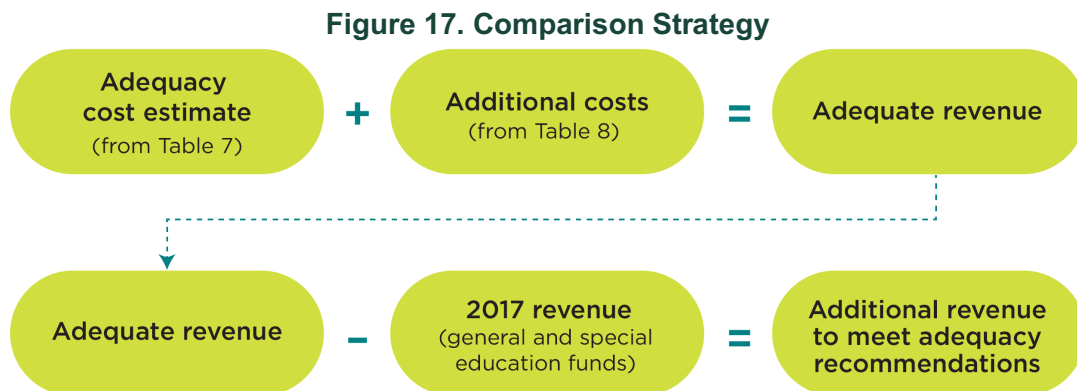
How do the adequacy study's recommendations compare to current funding levels in Michigan? How much additional revenue would be needed to implement the study's recommendations?

One very crude gauge is offered by a comparison of the study's \$9,590 base cost estimate to the state's basic foundation allowance in 2017. The basic foundation allowance that year was \$8,229, or \$1,361 below the adequacy study's base cost estimate. That is a substantial shortfall. On the other hand, Michigan's basic foundation allowance in 2003 was \$10,103 (in 2017 dollars), or \$513 above the adequacy study's base cost estimate.

Comparisons of the base cost estimate with Michigan's basic foundation are imperfect for two reasons. First local districts and charter schools have several revenue sources beyond the state's foundation allowance that currently pay for resources addressed by the adequacy study. Second, the adequacy study's base cost estimate does not include costs that public schools currently cover with foundation revenue, including student transportation, employee retirement (above 4.6 percent of wages), and some special education costs.

To obtain a better comparison of the revenue needed to implement the adequacy study’s recommendations and Michigan schools’ current spending levels, we examine the general fund and special education fund expenditures of the state’s public schools. These two funds include all current expenditures on items addressed in the adequacy study’s recommendations. They also include expenditures on some items that are not built into the adequacy estimate. Foremost among them are expenditures for student transportation and retirement above 4.6 percent of wages and salaries.

Figure 17 shows our strategy for comparing current revenue levels and the adequacy study’s recommendations.



We estimate the revenue required to implement most of the adequacy study’s recommendations. This includes the additional weights for at-risk, special education, and ELL students. For reasons we have already noted, we do not include additional pupil weights for school district size or regional cost-of-living adjustments. We include the adequacy study’s estimated preschool costs. Our baseline *Adequacy Cost Estimate* follows the study’s recommendations to separate the costs for retirement (above 4.6 percent of salaries) and student transportation. Since these are real expenditure requirements, we add them as additional costs to obtain the total revenue needed to implement the adequacy recommendations.

Table 7 displays our estimate of the revenue requirements to implement the adequacy study’s recommendations. We obtained the revenue required to implement each recommendation by multiplying the per-pupil cost by the number of pupils in the corresponding category.⁵⁶ Total enrollment in Table 7 exceeds Michigan’s statewide 2017 enrollment, because some students fall into more than one category.

⁵⁶ We derived the preschool enrollment estimate as follows. We relied on the American Community Survey, 2012-2016, which estimates 236,422 three- and four-year olds in Michigan. We assume half are four-year olds. We follow the conventional standard and assume that universal preschool is achieved when 80 percent of eligible children are served.

Table 7. Revenue Required to Fund Adequacy Study Recommendations

Pupil characteristic	Weights (adequacy study)	Weighted cost (per pupil)	Enrollment (2017)	Cost
Base				
	1.00	\$9,590	1,476,450	\$14,159,155,500
Poverty				
	0.35	\$3,357	611,340	\$2,051,962,710
ELL				
WIDA 1-2	0.70	\$6,713	18,691	\$125,472,683
WIDA 3-4	0.50	\$4,795	62,549	\$299,922,455
WIDA 5-6	0.35	\$3,357	8,353	\$28,036,845
Special education				
Mild	0.70	\$6,713	50,108	\$336,371,849
Moderate	1.15	\$11,029	7,538	\$83,137,244
Severe ^a	3.00	\$28,770	3,932	\$113,120,475
Preschool				
		\$14,155	94,569	\$1,338,621,364
Adequacy estimate		\$11,799	1,571,019	\$18,535,801,125

^a The adequacy study does not assign a weight to special education students with severe disabilities. Instead, it proposes that these costs be fully reimbursed by the state. We assume a weight of 3.00 for students with severe disabilities.

Table 8 shows the additional costs that need to be added to the adequacy estimate to produce a number comparable to the current general and special education funds.

Table 8. Additional Costs

Costs	Calculation	Amount
Retirement	Cost above 4.6 percent of salaries in general and special education fund	\$2,702,149,679
Transportation	Transportation costs in general and special education fund	\$796,537,597
Total		\$3,498,687,276

The Adequacy Cost Estimate is \$18.53 billion. When we add the \$3.5 billion in additional costs that are not included in this estimate, we arrive at \$22.03 billion in total revenue needed to implement the study's recommendations. In 2017, general and special education fund revenues of all Michigan districts and charter schools totaled \$18.4 billion. Consequently, the additional revenue needed to implement the adequacy recommendations is \$3.63 billion (\$22.03-\$18.40).

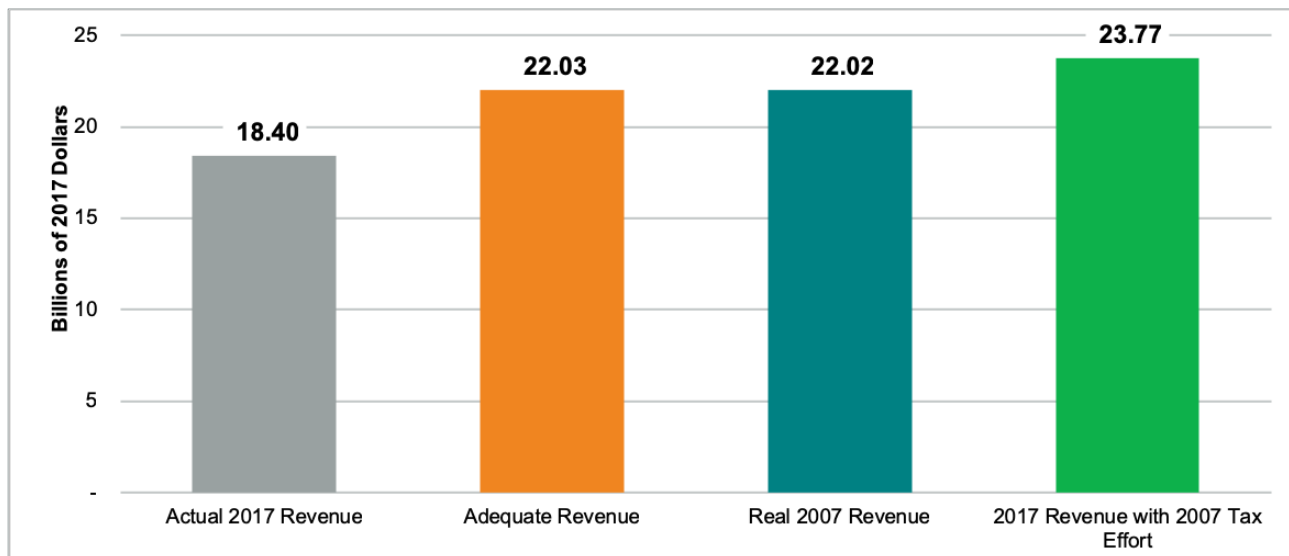
This would represent a substantial funding increase for Michigan schools. But it is not out of line with funding levels that prevailed in the state in the relatively recent past. This is a striking reflection of just how quickly and dramatically the state’s financial support for schools has fallen relative to adequate levels.

The value of Michigan’s total education revenues in 2007 (adjusted to 2017 dollars) was \$22.02 billion. Since 2007, Michigan’s economy has grown substantially. Yet declining tax effort, defined as general fund plus special education fund revenues divided by personal income, nevertheless diminished school revenue. If tax effort in 2017 remained at the level that prevailed in 2007 (5.17 percent of personal income), the revenue generated would surpass the amount needed to implement the adequacy study’s recommendations by over \$1.7 billion.

If tax effort in 2017 remained at the level that prevailed in 2007, the revenue generated would surpass the amount needed to implement the adequacy study’s recommendations by over a \$1.7 billion.

Figure 18 displays the revenue needed to meet the adequacy study’s recommendations in comparison to: actual 2017 revenue, 2007 revenue in 2017 dollars, and 2017 revenue if Michigan’s 2007 tax effort had been applied to the state’s actual personal income.

Figure 18. Comparison of Adequate Revenue with 2007 Revenue and 2017 Revenue with 2007 Tax Effort



Additional Work

The Michigan School Finance Research Collaborative study left some notable information gaps. Most pertain to issues outside the scope of work the researchers were contracted to perform. The most important of these is certainly the cost of constructing and upgrading school facilities. It is common for state adequacy studies to omit analyses of capital facilities. As we have stressed, however, school facilities are an essential element of educational adequacy, and Michigan’s way of funding facilities is clearly inequitable. No one

disputes this. The state's facility finance problem can also contaminate base cost estimates for school operations, as the adequacy study acknowledges. This is because schools with less access to capital bond and sinking fund revenue are often forced to devote much larger portions of their operating budgets to facility repairs, in order to address everything from leaking roofs to broken heating systems. The study, however, advises that the proper way to address this problem is by fixing facility funding, and recommends a full study of Michigan's school facility needs to inform that effort.

We agree with that assessment. The school facility study should include charter schools as well as districts. Better information on spending by charter schools on facilities and on unmet facility needs is an essential precondition for the design of state policies that could rectify what many charter advocates see as the most important funding disparity between charter and district schools.

Additional research is also needed to inform state policy on other key issues. Most important in our view, the study did not address the costs associated with declining enrollment. Funding for transportation costs also needs additional research.

By their very nature, adequacy studies estimate educational costs, but they do not stipulate how the revenues should be raised. We offer some thoughts on this question and some other recommendations in the final section.

SECTION 9

Summary and Policy Recommendations

A quarter century after Proposal A established the foundation of Michigan's current school-funding system, school finance is once again the subject of serious discussions. We offer 10 framing observations, before advancing our policy recommendations.

1. Michigan's education system is not performing well. Michigan students now fall below the national average on most measures of student performance. In contrast to 1993, when concerns about high property taxes and revenue inequalities among districts spurred change, unsatisfactory educational outcomes are now the primary catalyst for changes in funding policy.
2. The state controls most operating revenue available to Michigan's public schools. Yet neither in 1994 nor for decades afterward did it assess the cost schools face in meeting federal and state outcome standards, even as the federal No Child Left Behind act and the Michigan Merit Curriculum dramatically increased expectations for outcomes.
3. Rather, while the state increased expectations, it has steadily decreased real funding. Michigan's inflation-adjusted school-funding growth since 1995 ranks 50th among the 50 states. Real total revenue has declined by over 30 percent since 2002. This decline is due primarily to a sharp drop-off in the state's tax effort over the last decade.
4. Two recent school finance adequacy studies demonstrate how far Michigan's school funding has fallen below levels needed to provide all students with realistic chances of reaching the state's achievement standards. The state-commissioned 2016 study and the 2018 Michigan School Finance Research Collaborative (MSFRC) study highlighted major shortfalls in funding for special-needs students and preschool education, in addition to inadequate base funding for typical students.
5. The MSFRC study's cost estimates are based on school employees' current salaries. Increased funding recommendations are intended to pay for additional staff and instructional resources, not increased employee compensation. Yet funding matters for the teaching profession's attractiveness and the supply of high-quality teachers. Michigan ranks 46th among states in the growth of real average teacher salaries between 1999–2000 and 2016–17, with an 11.5 percent decline.⁵⁷ Michigan citizens understand the importance of high-quality teachers, but compensation has not matched those values.
6. Michigan's experience demonstrates that accountability and choice policies cannot substitute for adequate funding. By focusing on accountability and choice, Michigan

⁵⁷ Jenny Abamu, "The Data Tells All: Teacher Salaries Have Been Declining for Years," *EdSurge*, April 5, 2018. Available at <https://www.edsurge.com/news/2018-04-05-the-data-tells-all-teacher-salaries-have-been-declining-for-years>.

has sought to improve schooling on the cheap. This has not worked out well. Adequate funding that properly aligns revenues with costs is an essential component of, and complement to, well-designed accountability and choice policies.

7. Michigan's current funding system provides built-in advantages for wealthy school districts in three key ways. First, per-pupil foundation allowances are still upwards of 60 percent higher in wealthy communities than in most districts. (In 2016-17, the basic foundation was \$7,511, while the effective maximum was \$12,063.) Second, wealthy districts have far greater access to debt and sinking fund revenues to finance infrastructure improvements. And third (partly due to the first two factors), wealthy districts are far less vulnerable to enrollment loss to charter schools and other districts through interdistrict choice. In fact, to an extent not feasible in poorer districts, wealthy districts can increase funding by admitting nonresident students. Despite these advantages over other Michigan districts, funding in the state's wealthiest districts has steadily fallen relative to similar districts in other states.
8. Sustained, broad-based educational improvements will require additional financial resources. Opponents of increased school funding sometimes reveal their lack of familiarity with current research by claiming that money does not matter for school outcomes. As we summarize in a companion policy brief,⁵⁸ the growing consensus of top-notch, peer-reviewed research indicates that additional funding causes significant increases in student outcomes. Some of the most compelling research is based on Michigan.
9. Adjusting for inflation, Michigan's per-capita income was 10 percent larger in 2017 than in 1999. But the income of the median household was 16 percent smaller. This means that income inequality has increased. When we combine these facts with our values, we conclude that high-income Michigan households should take the lead in restoring tax revenues.
10. Michigan's school funding fell behind over a period of roughly 15 years, and it will take time to restore it. In the recommendations that follow we describe elements of a funding structure that can be established in the relative near term and then fully funded over time.

We conclude that high-income Michigan households should take the lead in restoring tax revenues.

Recommendations

We present here our recommendations for Michigan school finance policies. We aim to address the fundamental problems of public school finance: local disparities in the cost of and ability to pay for school resources necessary for all students to have realistic opportunities to meet ambitious outcome expectations as efficiently as possible. We are indebted to the work of the Michigan School Finance Research Collaborative and endorse most of the core recommendations of its 2018 adequacy study. This includes the study's separation of base and added costs, funding districts and brick-and-mortar charter schools equivalently, and establishing separate funding for student transportation and employee

⁵⁸ Tanner Delpier, Jesse Nagel, Alounso Gilzene, Kelly Stec, "Does Money Matter in Education? Reconsideration of an Old Question with Reference to Michigan" MSU Education Policy Brief.

retirement costs above 4.6 percent of wages. We also differ with several of the study's recommendations.

Preschool

- We follow the MSFRC's recommendation of universal, full-day preschool for four-year-old children in classes of 15 with one certified teacher and one aide. This preschool instruction would be optional. Some families would choose other options for their children. We also endorse the provision of preschool for at-risk children at three years of age.⁵⁹ The exceptional cost-effectiveness of high-quality early childhood education, especially for disadvantaged children, is firmly established in the research literature.⁶⁰

Base Per-Pupil Funding: \$9,590

- We endorse the MSFRC's \$9,590 base funding recommendation for regular education K-12 students. This is the best available estimate of the cost of school resources needed for Michigan students to attain the state's outcome expectations.
- The new base foundation is not directly comparable to current foundation allowances, because it does not include the costs of transportation, retirement (above 4.6 percent of wages), and special education encroachment, all of which are now funded with foundation revenues.
- To avoid deterioration in funding adequacy over time, the base foundation must increase with inflation. Targets for annual base foundation increases could be based on a three-year moving average of recent inflation rates.

Differential Cost Funding

- To address the needs of high-cost students and schools, we endorse the MSFRC's recommendation to specify additional funding by per-pupil weights, above the base foundation weight of 1.0.

Poverty: 0.35 Pupil Weight

- This pupil weight for family poverty, proxied by student eligibility for the federal free and reduced-price lunch program, is at the low end of estimated poverty weights in previous academic research and adequacy studies,⁶¹ but it represents a crucial increase in resources for Michigan's at-risk students. It would help fund tutors, counselors, extended days, summer school, and other supports for struggling students.

⁵⁹ The cost of preschool for at-risk three-year-old children was not included in our Table 7 adequate revenue estimates. If preschool costs for 30,000 at-risk three-year-old children are included, required revenues still fall \$1.3 billion below 2017 revenues with 2007 tax effort.

⁶⁰ James Heckman, "Skill Formation and the Economics of Investment in Disadvantaged Children," *Science* 312 (June 2006): 57-82; W. Steven Barnett, *Lives in the Balance: Age-27 Benefit-Cost Analysis of the High/Scope Perry Preschool Program* (Ypsilanti, MI: High/Scope Educational Research Foundation, 1996).

⁶¹ Anabel Aportela, Lawrence O. Picus, Allan Odden, and Mark Fermanich, *Comprehensive Review of State Adequacy Studies since 2013*, report prepared for the Maryland State Department of Education, September 12, 2014. Available at http://marylandpublicschools.org/Documents/adequacystudy/AdequacyReviewReport_rev_091214.pdf.

- Michigan schools should first upgrade supports for low-income students along the lines detailed in the MSFRC study, before state policymakers implement potentially higher weights for districts with high concentrations of (a) poor students or (b) high-need poverty students (e.g., those who are homeless, who are teen parents, or victims of abuse).
- We agree with the MSFRC's recommendation of further study of the costs of serving high-need poverty students. The research should establish specific definitions for what constitutes high-need poverty and clearly identify additional service needs beyond those of economically disadvantaged students. We believe that any such definition should set a high bar for students to qualify for additional funding and that the additional funding weight could be capped in the neighborhood of 0.15.

English Language Learners: Pupil Weights of 0.70 for WIDA 1-2, 0.50 for WIDA 3-4, and 0.35 for WIDA 5-6

- The MSFRC's recommended weights are based on students' scores on the World-Class Instructional Design and Assessment (WIDA) Consortium's assessment for English-language proficiency. Lower scores indicate more limited English proficiency.

Special Education: 0.63 for Mild Disabilities, 1.04 for Moderate Disabilities, and 90 percent State Reimbursement for Severe Disabilities

- Most states use multiple funding weights based on students' disability severity. The three recommended categories are based on the share of students' time spent in general education classrooms (mild: greater than 80 percent; moderate: 40-80 percent; severe: less than 40 percent).⁶²
- Our recommendations represent 90 percent of the MSFRC's estimated cost and funding recommendations for each disability category. While we accept the MSFRC's thorough special education cost estimates as credible, we believe special education service providers should face financial incentives to provide those services as cost-effectively as possible.
- The weights would apply only to full-time-equivalent enrollment counts. So for a student whose individual education plan (IEP) called for special education placement for 20 percent of the time and 80 percent in a regular classroom, the additional weight would apply to the equivalent of only 0.2 pupil.
- Equity certainly would be best served if the state were to fund these special education costs. In that case, ISD special education millages could be phased out. If, however, the state continues to leave a portion of the funding responsibility to ISDs, then (as we discussed in [section 5](#)) it is essential for the state to establish a stronger guaranteed tax base program to equalize ISDs' ability to pay this burden, and to equalize upward caps currently placed on ISD special education millages.
- In contrast to current practice in Michigan, all special education funding should be in addition to the full base foundation allowance available to all students.
- As discussed in [section 5](#), we also recommend an age limit reduction for special education service eligibility from 26 to 21, coupled with a shift in resources to special-

⁶² Roughly nine percent of Michigan students are classified as having mild disabilities, 2.5 percent moderate, and 1.5 percent severe.

needs services to children under age three and services to support transition to adult independent living for those over 21.⁶³

Declining Enrollment: Three-Year Moving Average for Base Pupil Count

- The MSFRC did not consider declining-enrollment costs, although they are real and clearly evident in Michigan. We recommend a modest adjustment used in several states.
- Consequently, district and charter school base funding pupil counts would be based on either (a) a 50-50 weighting of spring previous-year and fall current-year enrollment, or (b) a three-year moving average of past- and current-year fall enrollment, whichever is greater.

Other Adjustments to Base Foundation Funding

- The MSFRC study proposed additional funding weights for both district enrollment size and regional cost-of-living variations. As we explained in [section 8](#), we do not believe either adjustment is a high priority and do not recommend them. In our view, given scarce resources, the funding needed to implement both of these recommendations could be put to better use.
- We also differ with the MSFRC's recommended 0.1 pupil weight for career and technical education. We do not question the continuing, indeed increasing, importance of high-quality career and technical education for many Michigan students. However, the nature and cost of this training is quite variable. Consequently, to provide the proper incentives, it is important for the state to establish clearer guidelines for career and technical education services that warrant additional funding. This requires further study comparable to the resource analyses the MSFRC carried out for its base and struggling-student cost estimates.
- We support the MSFRC's recommended 0.04 per-pupil funding weight for schools in isolated settings. Remote areas lack counseling and physical and mental health services more readily available in other areas through nonschool organizations. It therefore falls to schools to supply these services. We agree with the MSFRC's suggestion to keep the state's current definition of isolated areas, but remove its restriction to districts in the Upper Peninsula.

Retirement Costs

- We embrace the MSFRC's recommendation that costs of employee retirement above 4.6 percent of wages and salaries be funded by the state. Since expenditures required to meet these costs are determined at the state, not the local, level, they are true costs from the standpoint of local officials. This recommendation also insulates the adequacy of children's educational funding from future changes to school employee retirement systems by state officials.

⁶³ The National Early Intervention Longitudinal Survey found that 42 percent of children who participated in IDEA's early intervention program (Part C of IDEA) did not need special education services later in life. Hebbeler et al., *Early Intervention*.

Transportation

- We agree with the MSFRC's recommendation that student transportation funding should be provided outside the base foundation and tied to actual transportation costs. We also agree that a study of transportation costs of Michigan schools is essential before a suitable state funding formula can be developed. In our view, the \$723 per-rider funding that the MSFRC recommends until such a study is completed is too uniform and possibly too high on average.⁶⁴ An alternative, and strictly short-term, option would be to fund district and charter school transportation expenses at their current levels for a designated period until the new funding formula is developed.
- A district's geographical area and population density influence transportation costs, which are typically higher in rural than metropolitan areas. Costs also depend on service levels. For example, is transportation provided to school sport team events or field trips, or for students who participate in regular after-school activities? If schools do not provide transportation services, the cost is shifted to parents, who vary in their capacity to bear the time and monetary costs. A transportation cost study would have to specify relevant parameters on each of these factors.
- School choice complicates the design of student transportation. Yet the lack of transportation limits families' choices. In settings with lots of school choice, leaving transportation provision to each district and charter school is highly inefficient, as buses for different schools cross paths with one another. Coordination of transportation services among districts and charter schools may lower costs. This strategy is currently being pursued in a number of areas nationally and in a small section of Detroit. A transportation cost study should evaluate these options as well as that of contracting transportation provision to private firms or ISDs.

Capital Facilities

- The MSFRC study did not address the cost of adequate school facilities, but recommended that the state perform a full study of facility needs and costs in districts and charter schools. We strongly support this recommendation. As we described in [section 6](#), Michigan's school facility finance is highly inequitable, and policymakers have neglected this persistent problem since before Proposal A's passage.
- We recommend the establishment of a guaranteed tax base program dedicated to school facility finance. A GTB program does not guarantee adequate facilities, but it can neutralize inequities in districts' ability to pay for facilities, while preserving local control over these important decisions for community life.
- The guaranteed tax base should be set above the mean per-pupil taxable value among Michigan's districts. The state could establish environmental and other standards that must meet in order for capital projects to be eligible for state funds. The GTB funds should be available for both sinking fund and debt financing of capital facility costs.
- Revenues to fund the GTB could be derived through the sale of long-term bonds by the state and held in a new School Facility Aid Fund (SFAF).

⁶⁴ The MSFRC report originally recommended \$973 per-rider. This was an error in the original report that has since been corrected.

- Charter schools would be unable to access facility subsidies through a GTB program. So we recommend the establishment of a categorical grant from the SFAF to subsidize charter school rental payments. Access to these funds should be conditional on charter schools reporting their facility arrangements and rental payments.
- Longer term, we recommend transition to a system in which the state purchases and owns school buildings and equipment that charter schools could rent with earmarked capital infrastructure funding. Then if a charter school closes, these assets could be used by another charter operator.

Virtual Charter Schools

- Like the MSFRC, we recommend different base funding for virtual charter schools than brick-and-mortar charters and districts. The resources and services in virtual schools are very different from those stipulated for adequate schools analyzed by the MSFRC. For example, a national study found that teacher-student ratios in virtual schools are roughly double those of brick-and-mortar schools.⁶⁵ Virtual school costs differ accordingly. The design of appropriate funding arrangements for virtual schools is still in its infancy in Michigan and other states.
- If Michigan aims to establish efficient funding for online instruction that embodies proper incentives for service providers, it must first conduct a cost study of online instruction.

Financial Reporting and Transparency

- Financial transparency is an essential component of school efficiency and accountability. The state of Michigan requires all local and intermediate districts and charter schools to annually submit detailed information on their revenues, expenditures, and financial audits. This public information permits parents, citizens, and researchers to compare spending patterns across local education agencies. However, equivalent information is often unavailable when charter schools or districts contract out service provision to private firms. These contracting arrangements should be more transparent.
- Just as districts are required to post their collective bargaining agreements with employees on their websites, districts and charter schools should be required to make their contracts with external entities, above a threshold value, publicly available. We recommend required website posting of contracts between charter schools and their education management organizations, and between districts (or charter schools) and private or public providers of transportation, custodial, food, payroll, and other support services.
- Finally, we recommend modification of the state's financial reporting guidelines such that rental payments are disclosed and clearly identified on financial reports that all district and charter schools submit to the state, and that state agencies make available equivalent information on employee compensation in all public schools.

⁶⁵ Alex Molnar, Gary Miron, Charisse Gulosino, Christopher Shank, Caryn Davidson, Michael K. Barbour, Luis Huerta, Sheryl Rankin Shafter, Jennifer King Rice, and David Nitkin, *Virtual Schools in the U.S. 2017* (Boulder, CO: National Education Policy Center, 2017). Available at <https://nepc.colorado.edu/publication/virtual-schools-annual-2017>

Raising Additional Revenue

- It was beyond the scope of the MSFRC study, or any adequacy study, to determine how additional revenues needed to fund educational adequacy should be raised. We offer a few observations on this question.
- While it may be an appropriate policy change, ending the state's current allocation of School Aid Fund revenues to uses other than K-12 education would not on its own free sufficient resources to pay for adequate school funding. Moreover, such a change would require either cutting other state government services or raising state General Fund revenues.
- Efforts to secure additional state revenue should observe standard economic criteria for "good" taxes. They should be stable revenue sources. They should promote efficiency through low costs of administration and compliance, and entail few disruptions to individuals' economic behavior. And they should be fair among taxpayers.
- We view a number of potential changes as worthy of serious consideration, including lifting or removing the taxable value cap for the property tax, extending the sales tax to services and entertainments, and changing the taxes on beer and wine to an ad valorem basis.
- Michigan's state income tax is currently a 4.25 percent flat rate. The federal government and 36 states have graduated income taxes. The establishment of a graduated income tax coupled with an increase in the state's earned income tax credit would constitute major improvements in tax fairness, by linking increased revenue to taxpayers' ability to pay.
- Policymakers should also seriously reexamine the merits of tax expenditures that have proliferated over time, including many that impact revenues available for public schools. These include tax exclusions, deductions, deferrals, and credits that benefit specific activities or taxpayers.⁶⁶ It is only fitting, for example, before officials grant property tax exemptions worth hundreds of millions of dollars to commercial endeavors that they carefully weigh the statewide impact on Michigan's education system.
- New revenues to fund educational adequacy need not come exclusively from state taxes. Local districts could be required to increase their contribution (above the currently required 18 mills on nonhomestead property) in order to receive their state base funding. This could be accomplished with an adjustment of the required local millage rate, the inclusion of homestead property in the required millage tax base, or some combination of the two.
- Michigan communities could gain a measure of local control over funding if they were permitted to approve enhancement millages. We recommend this option as a complement, not a substitute, for adequate statewide funding. The state could cap the number of enhancement mills and could offset the potential for enhancement millages to increase inequality by incorporating an equalizing component. For example, the state could recapture a percentage of local enhancement-millage revenue that increases with district per-pupil taxable value. This revenue, in turn,

⁶⁶ Michigan Department of Treasury, Executive Budget Appendix on Tax Credits, Deductions, and Exemptions: Fiscal Years 2016 and 2017. Available at: https://www.michigan.gov/documents/treasury/ExecBudgAppenTaxCreditsDedExempts_FY_20152016_476553_7.pdf

could be redistributed through a GTB formula to low-property-wealth districts that pass local enhancement millages.

Concluding Thoughts

Michigan ranks 50th out of 50 states in the improvement (or lack thereof) of student proficiency between 2003 and 2015.⁶⁷ As we have shown, Michigan also ranks 50th out of 50 states in the growth of inflation-adjusted K-12 education revenue over this same period. We do not believe that school funding is the only aspect of Michigan's education system requiring significant changes. We strongly maintain, however, that changes to the state's school finance system are essential in order to reverse Michigan's educational decline. Our funding policy recommendations will establish a vital foundation for needed improvements in teaching and learning.

Michigan is falling further and further behind other states with better-educated workforces. The state is not well positioned to compete for the coveted high-skill, high-wage jobs of the new economy. Business leaders are increasingly troubled by the trajectory of the state's schools.

The consequences of Michigan's funding neglect can be observed in schools and classrooms across the state. Services have been gradually reduced even as state outcome standards and the share of at-risk students have increased.

Many schools have been forced to increase class sizes, reduce course offerings, and cut spending for teacher professional development, instructional coaches, and textbooks and supplies. Across the state, dedicated teachers feel compelled to use their own income to purchase classroom supplies for their students.

One can gain perspective on what would be needed to reverse Michigan's dismal trajectory by looking to the highest-performing state, Massachusetts. In 1994, student performance in both states was above the national average, but far from the top. Per-pupil funding was slightly higher in Michigan. Today, Massachusetts students rank atop the National Assessment of Educational Progress, with achievement levels that compare favorably to high-performing nations abroad, while Michigan is sinking toward the bottom. Massachusetts now spends over \$5,500 more per student annually than Michigan.

Michigan's education policy now sits at a crossroads. A quarter century of increased state control has spectacularly failed to deliver the schools that Michigan's children deserve.

How did the Bay State succeed?⁶⁸ At about the same time that Michigan passed Proposal A and expanded school choice options, Massachusetts fashioned a bipartisan commitment to raise learning standards, strengthen teacher professional development, and invest heavily in classrooms.⁶⁹ State policymakers explicitly coupled increased funding with increased

⁶⁷ Brian Jacob, "How the U.S. Department of Education Can Foster Education Reform in the Era of Trump and ESSA," Brookings Evidence Speaks Report 2, no. 7, February 2, 2017.

⁶⁸ Paul Reville, "The Journey toward Equity and Excellence: The Massachusetts Experience," in *Excellence through Equity*, ed. Alan M. Blankenstein and Pedro Noguera (Thousand Oaks, CA: Corwin, 2015), 185-201.

⁶⁹ Five of Massachusetts's six governors since 1994 have been Republican.

learning expectations and relied on an adequacy study to guide school finance policy. The state established a well-regarded accountability system and a highly professional state department of education to support struggling schools. The state's business community has played a key supportive role in Massachusetts's education planning, recognizing that a well-educated citizenry is the most promising path to prosperity in the new economy.

Michigan's education policy now sits at a crossroads. A quarter century of increased state control has spectacularly failed to deliver the schools that Michigan's children deserve. No one could be surprised if Michigan's citizens lack confidence in state policymakers' ability to craft a better, more coherent, and compelling policy framework for public schools.

Progress will require bipartisan leadership that is committed to a new social contract between Michigan's citizens and their state government. Michigan citizens will be willing to pay higher taxes to establish a first-rate public education system, if (1) they have confidence in how the money will be spent, and (2) they believe any increased tax payments are fairly shared among taxpayers.

Fortunately, the Michigan School Finance Research Collaborative has provided an excellent foundation to address the first of these conditions. We differ with some of the MSFRC's specific recommendations, but these are the sort of details that now demand broad public input and deliberation. As for the second condition, we have shown that adequate funding is readily within Michigan's reach if we return to levels of statewide tax effort that prevailed only a decade ago. Planning how to raise that revenue fairly and efficiently is an essential component of a new social contract to establish a better-performing public education system in Michigan.